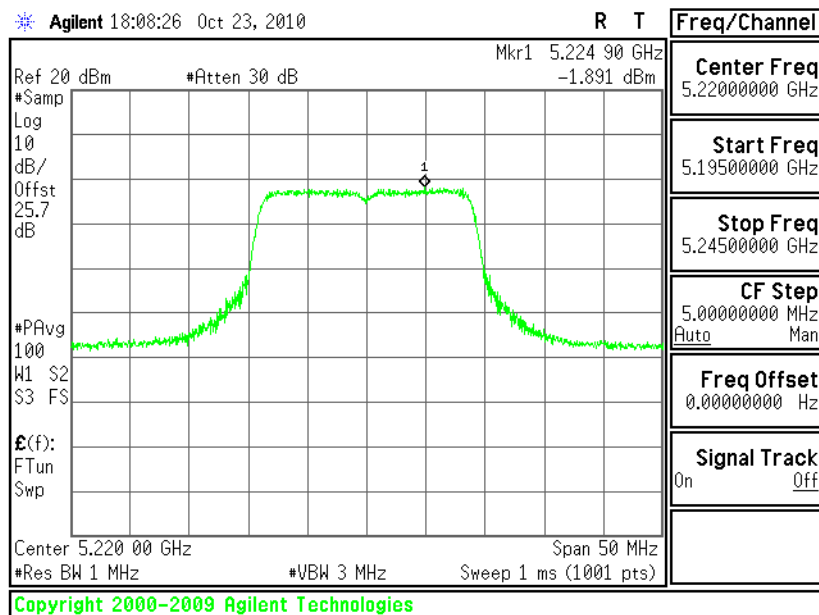
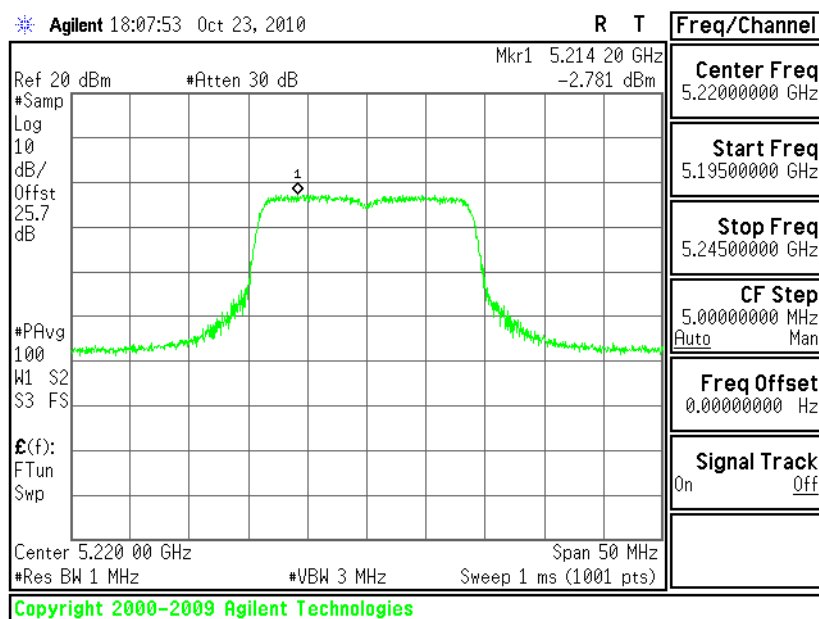




PSD Plot on 802.11n (HT-20) Channel 44 - Chain 1

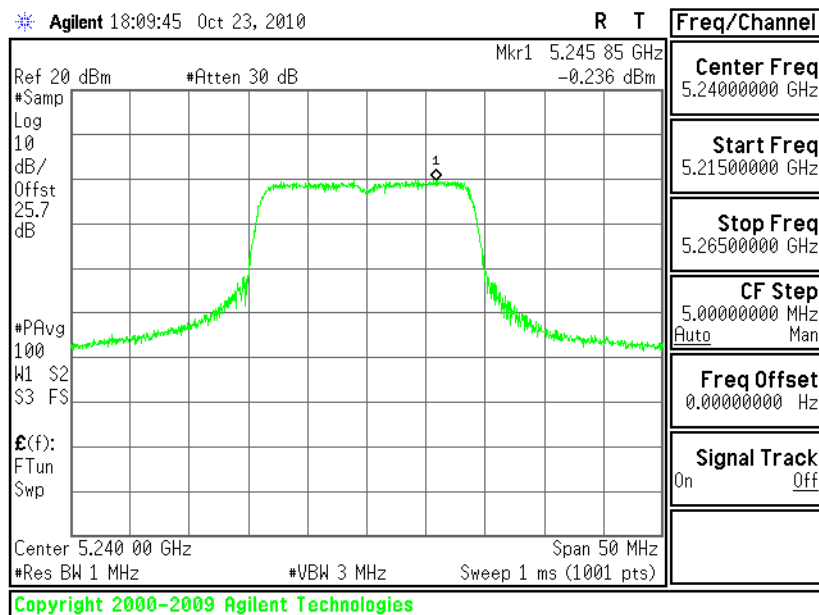


PSD Plot on 802.11n (HT-20) Channel 44 - Chain 2

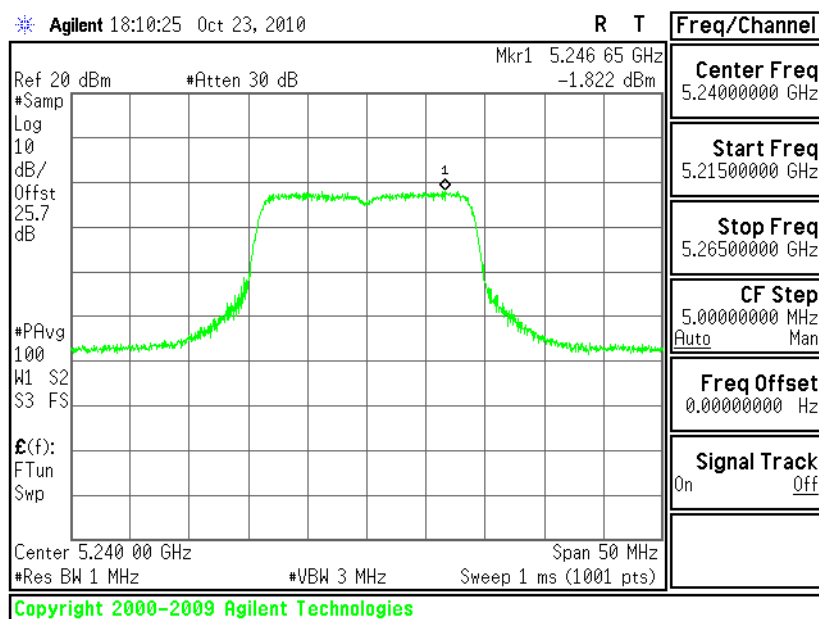




PSD Plot on 802.11n (HT-20) Channel 48 - Chain 0

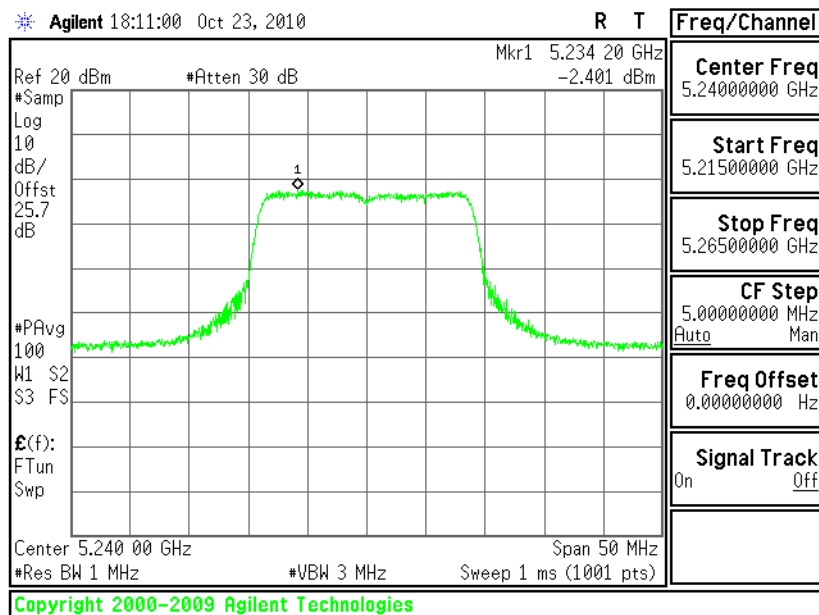


PSD Plot on 802.11n (HT-20) Channel 48 - Chain 1

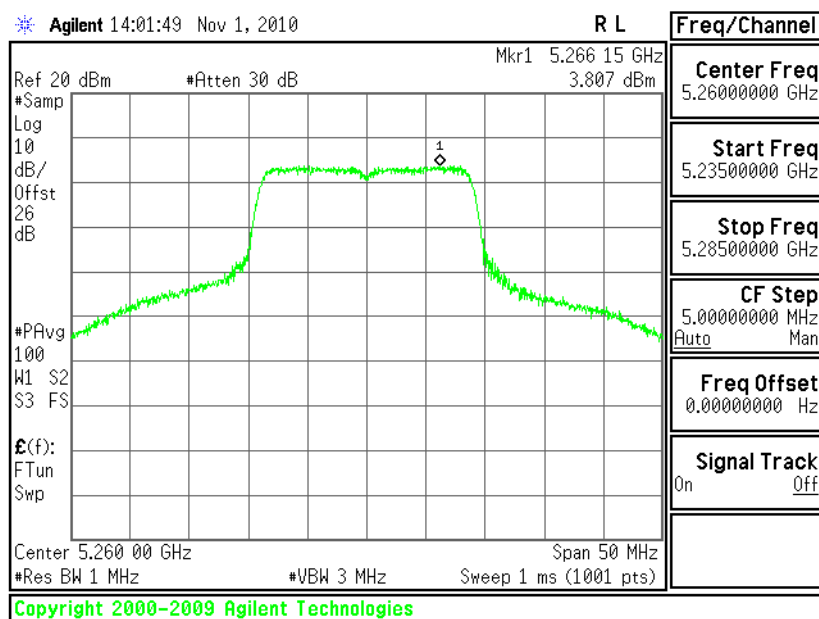




PSD Plot on 802.11n (HT-20) Channel 48 - Chain 2

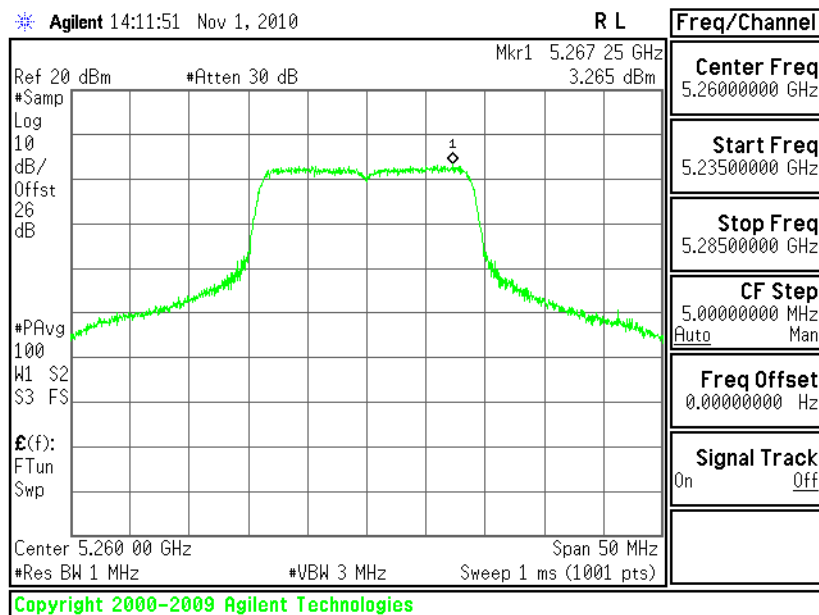


PSD Plot on 802.11n (HT-20) Channel 52 - Chain 0

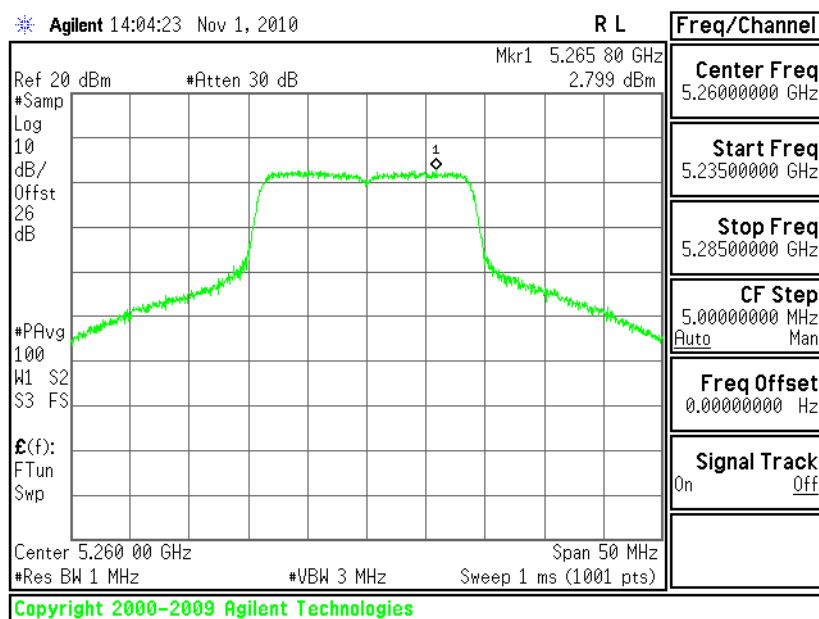




PSD Plot on 802.11n (HT-20) Channel 52 - Chain 1

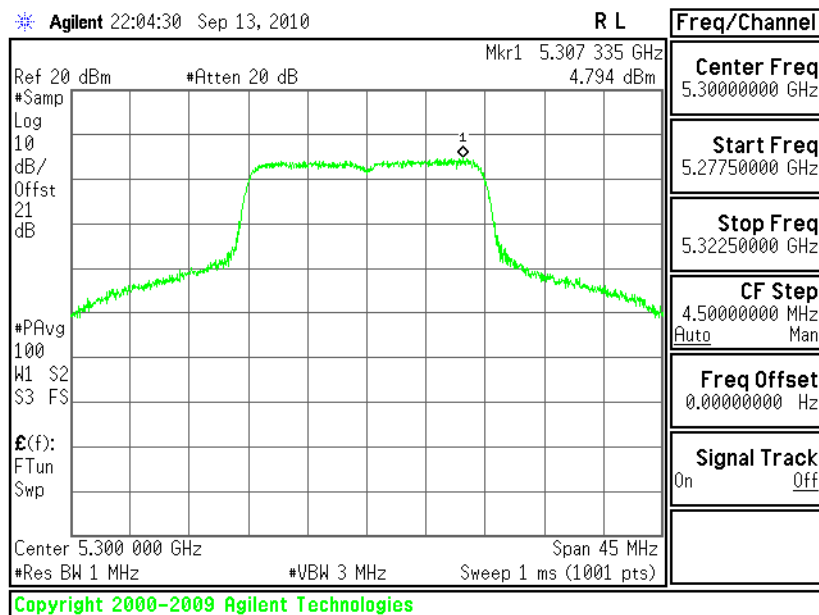


PSD Plot on 802.11n (HT-20) Channel 52 - Chain 2

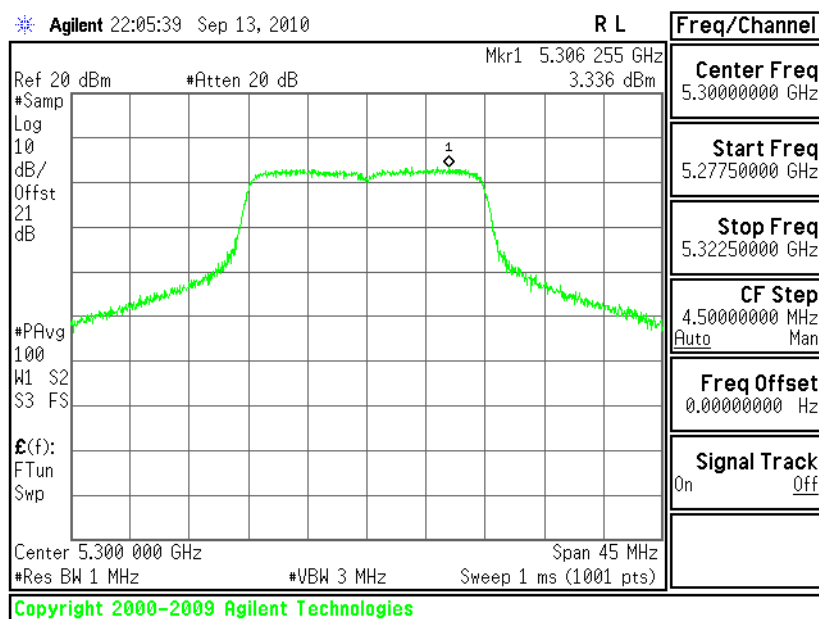




PSD Plot on 802.11n (HT-20) Channel 60 - Chain 0

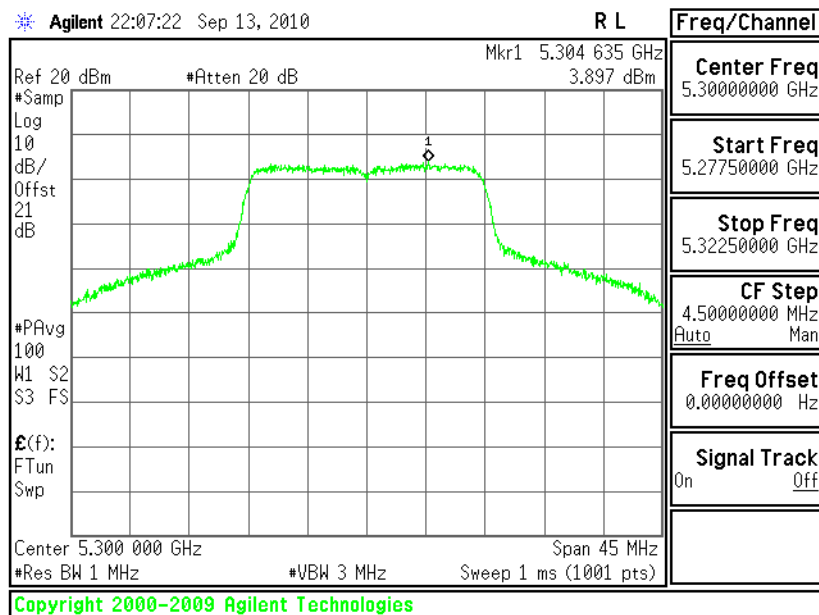


PSD Plot on 802.11n (HT-20) Channel 60 - Chain 1

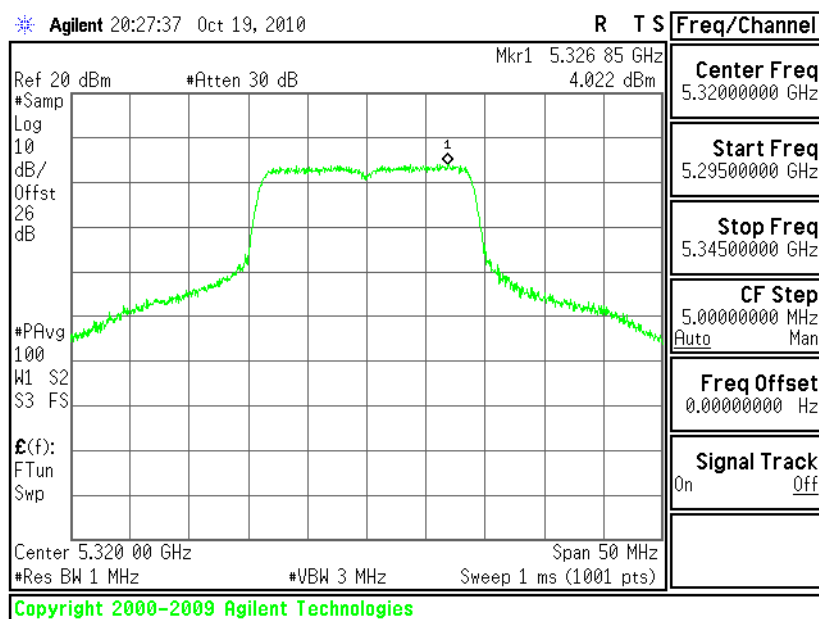




PSD Plot on 802.11n (HT-20) Channel 60 - Chain 2

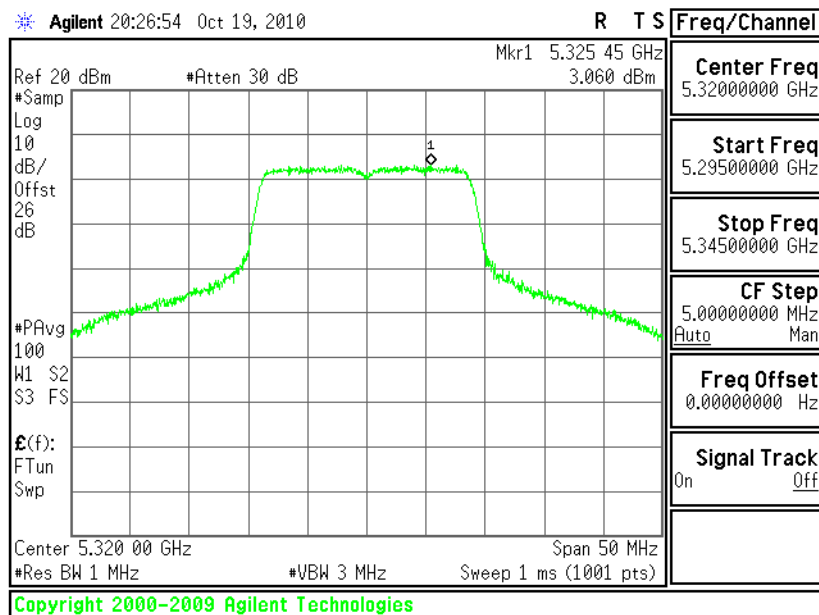


PSD Plot on 802.11n (HT-20) Channel 64 - Chain 0

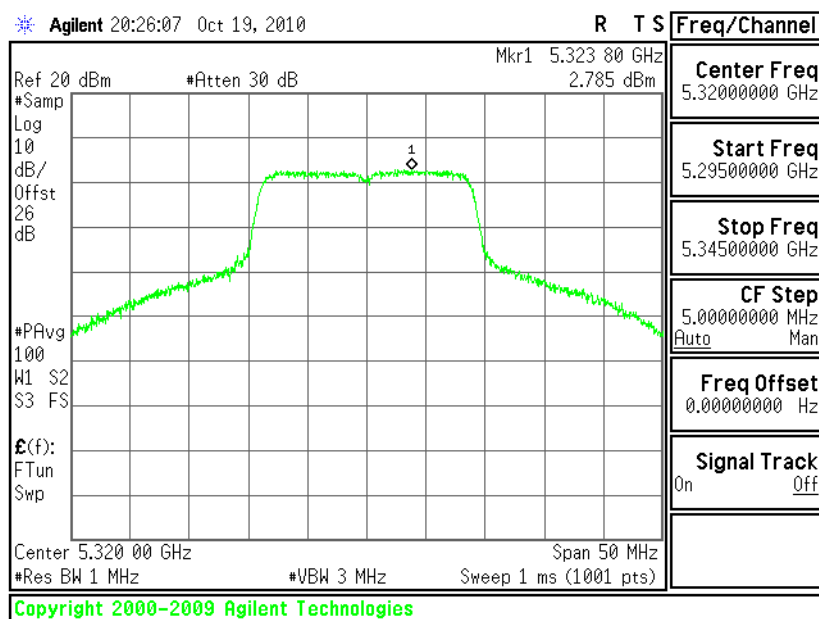




PSD Plot on 802.11n (HT-20) Channel 64 - Chain 1

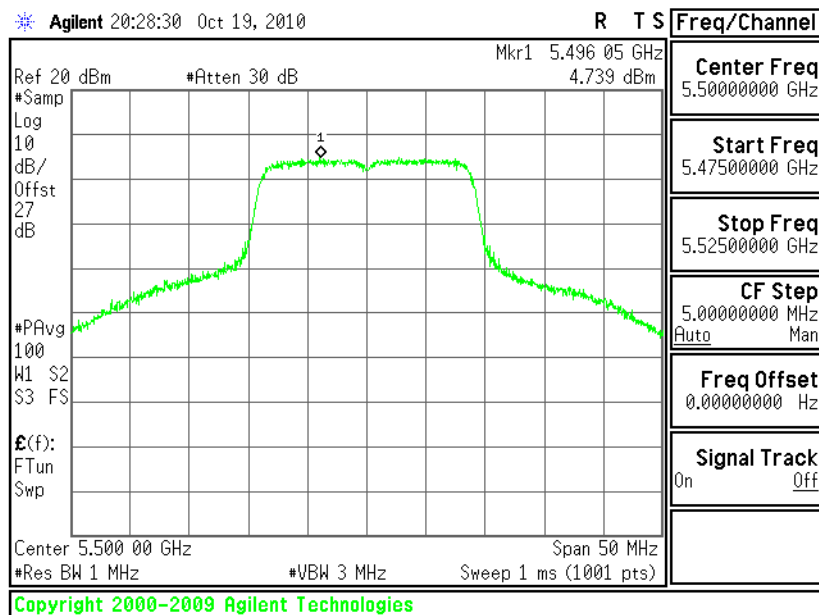


PSD Plot on 802.11n (HT-20) Channel 64 - Chain 2

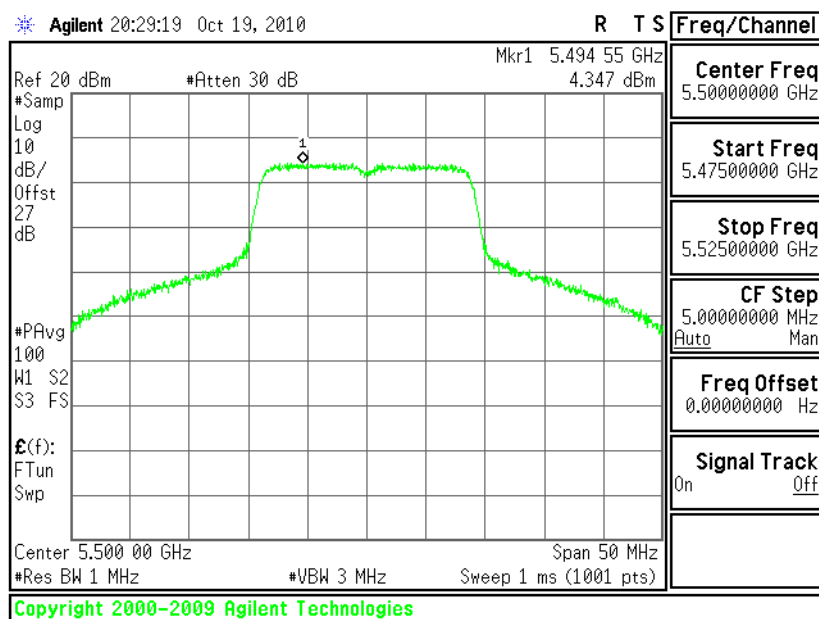




PSD Plot on 802.11n (HT-20) Channel 100 - Chain 0

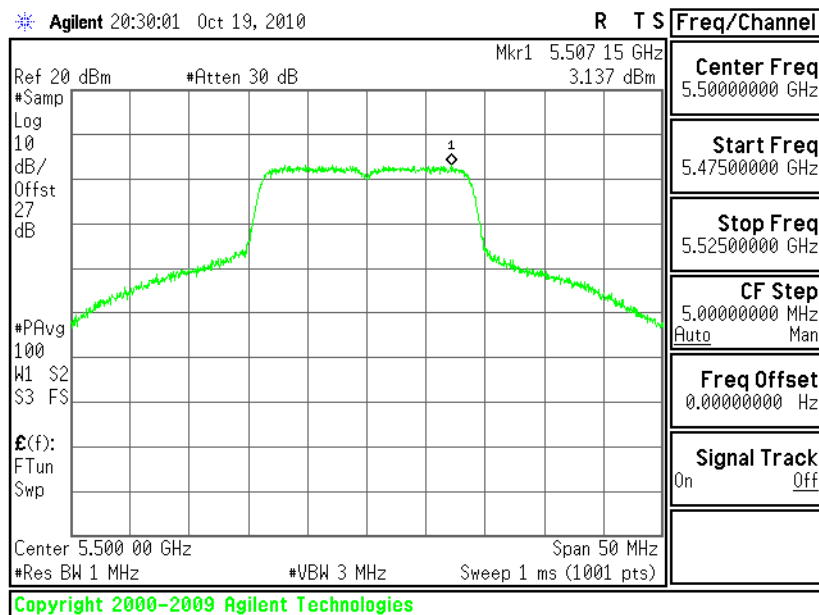


PSD Plot on 802.11n (HT-20) Channel 100 - Chain 1

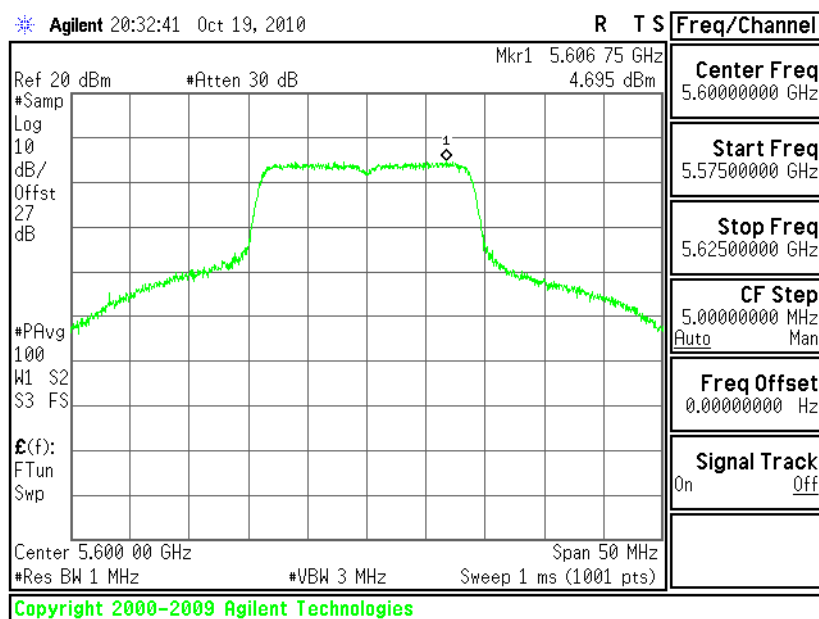




PSD Plot on 802.11n (HT-20) Channel 100 - Chain 2

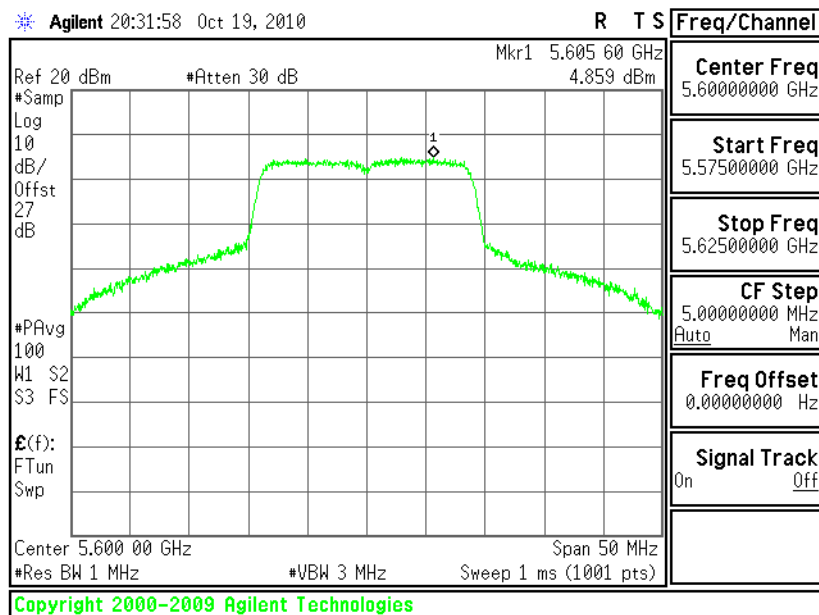


PSD Plot on 802.11n (HT-20) Channel 120 - Chain 0

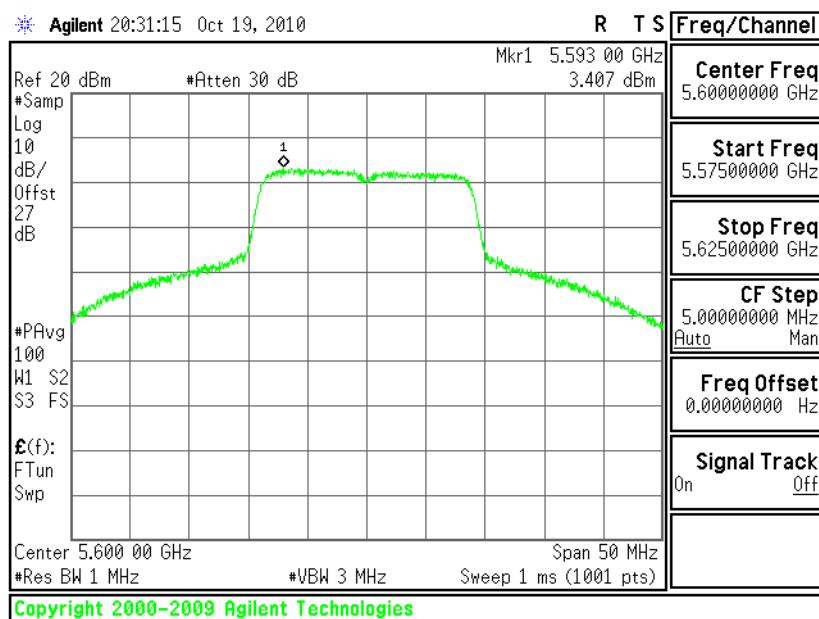




PSD Plot on 802.11n (HT-20) Channel 120 - Chain 1

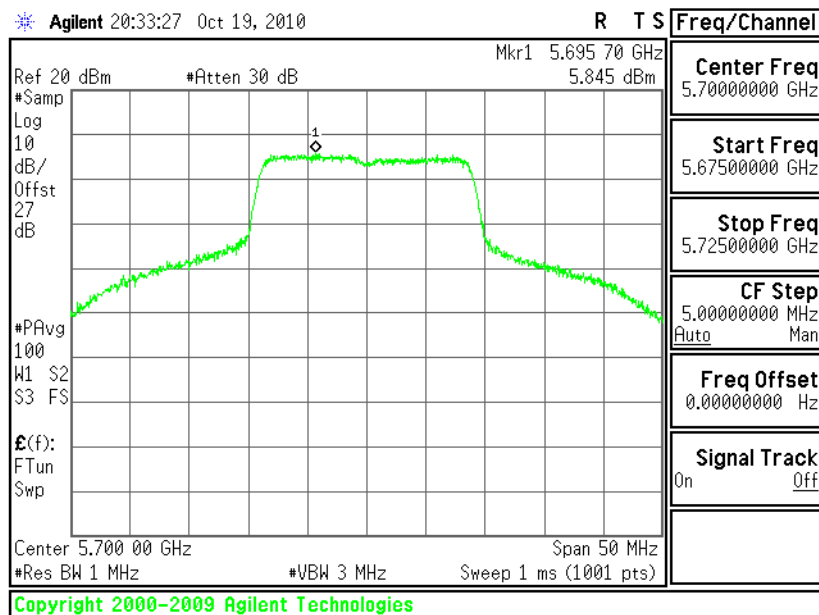


PSD Plot on 802.11n (HT-20) Channel 120 - Chain 2

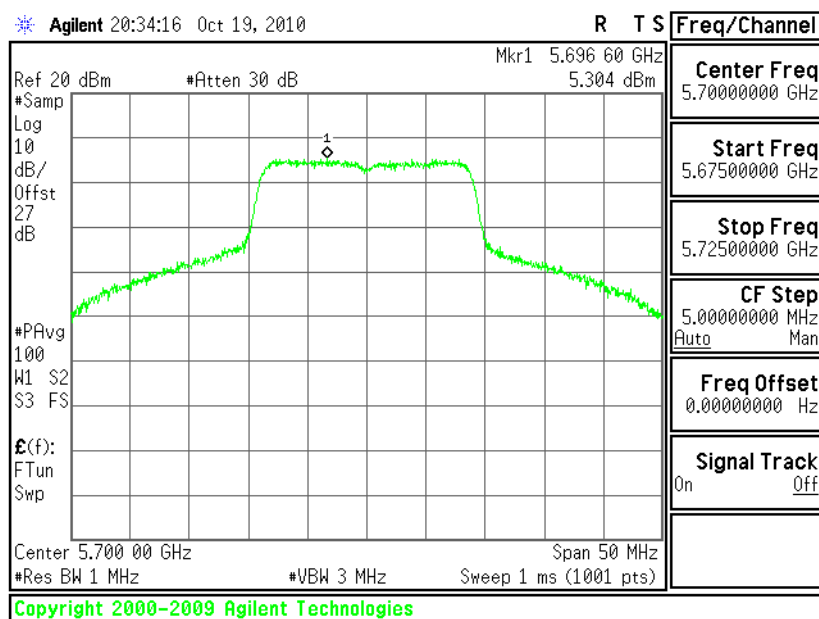




PSD Plot on 802.11n (HT-20) Channel 140 - Chain 0

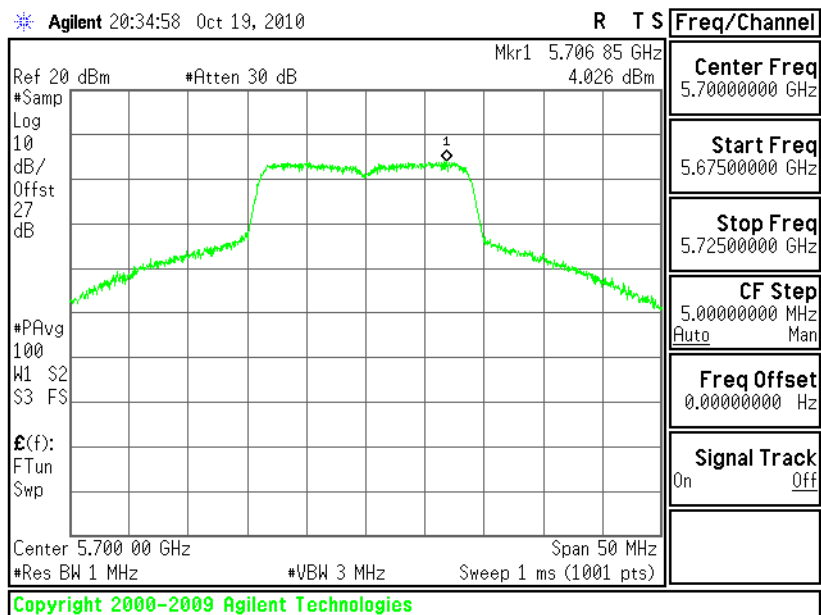


PSD Plot on 802.11n (HT-20) Channel 140 - Chain 1





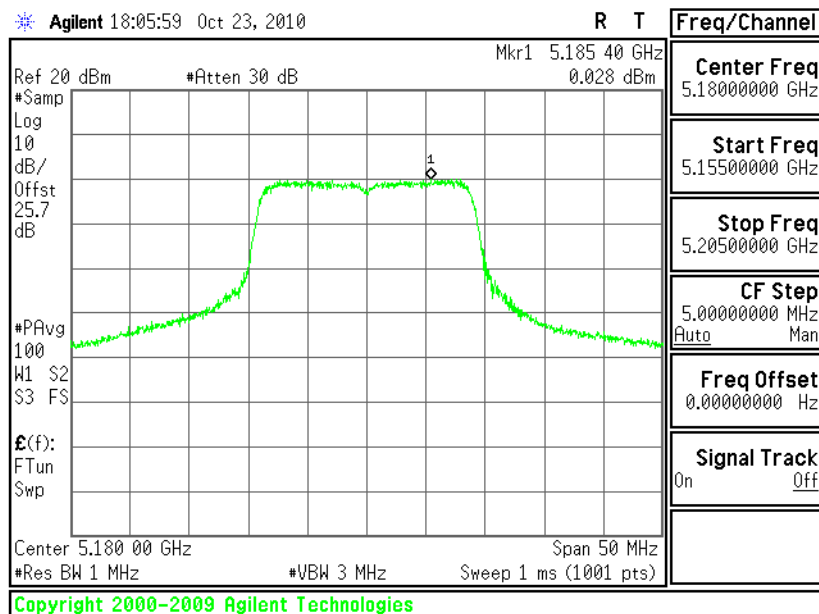
PSD Plot on 802.11n (HT-20) Channel 140 - Chain 2



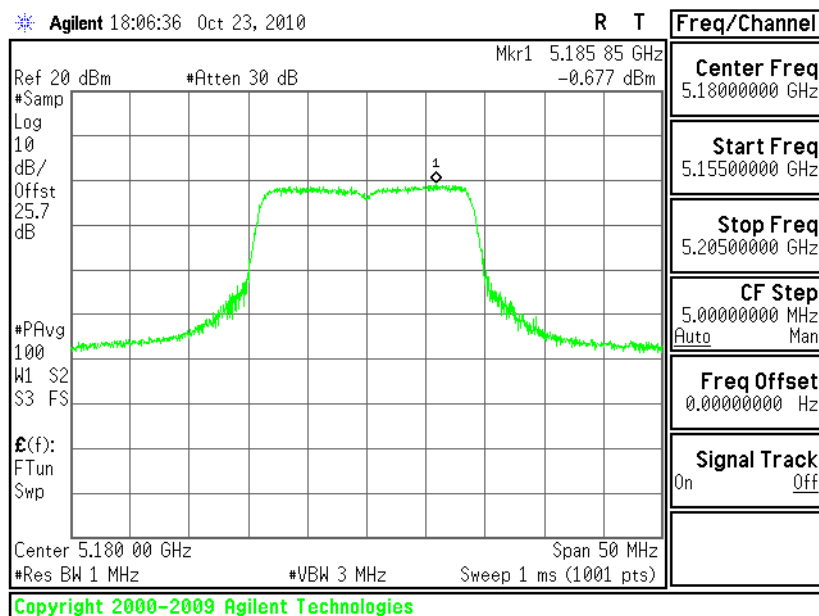


<Beam-Forming Off: 2x3>

PSD Plot on 802.11n (HT-20) Channel 36 - Chain 0

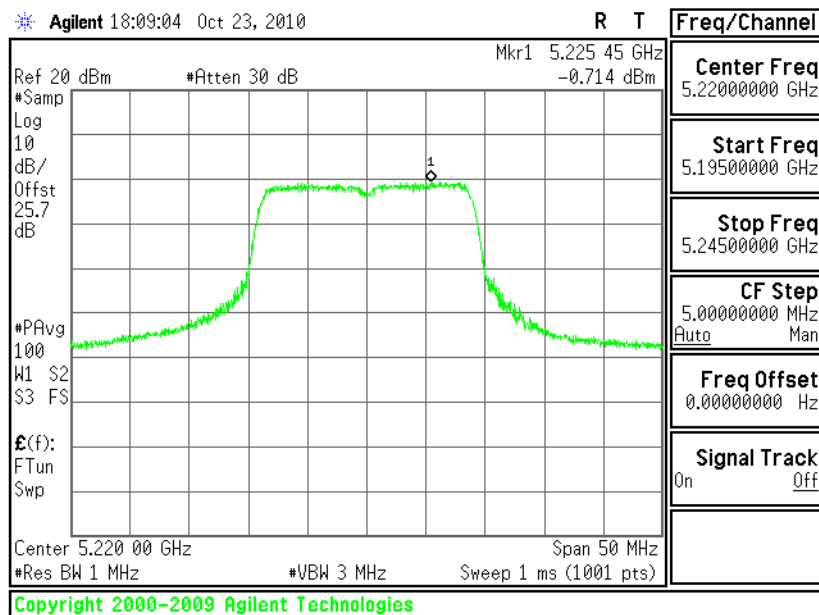


PSD Plot on 802.11n (HT-20) Channel 36 - Chain 1

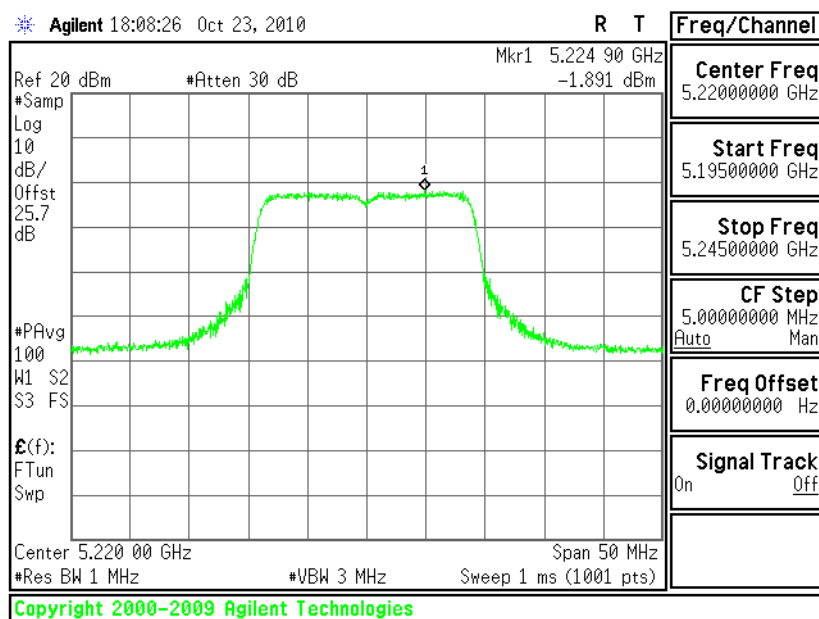




PSD Plot on 802.11n (HT-20) Channel 44 - Chain 0

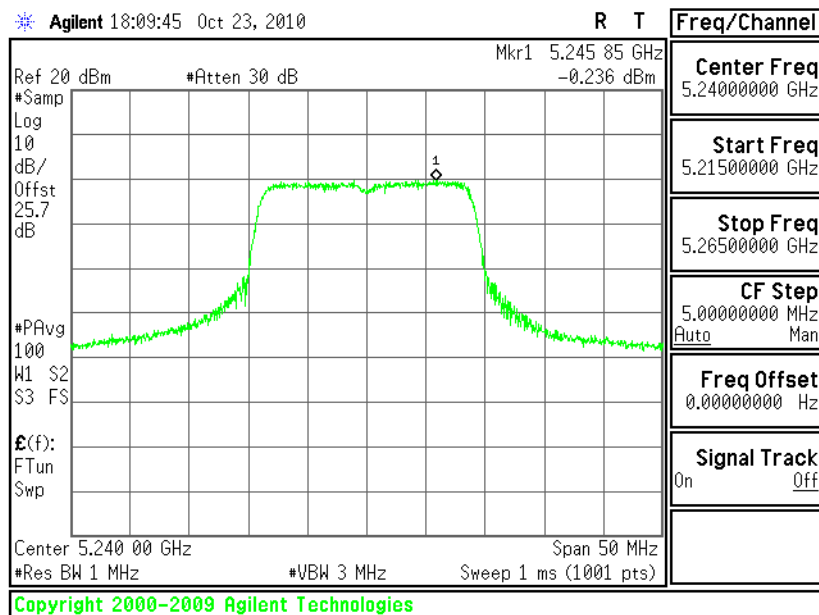


PSD Plot on 802.11n (HT-20) Channel 44 - Chain 1

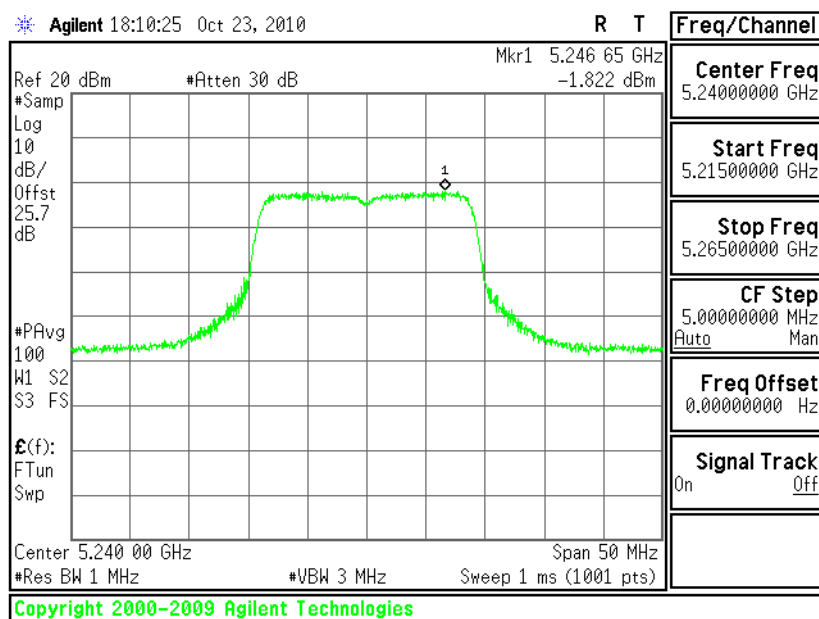




PSD Plot on 802.11n (HT-20) Channel 48 - Chain 0

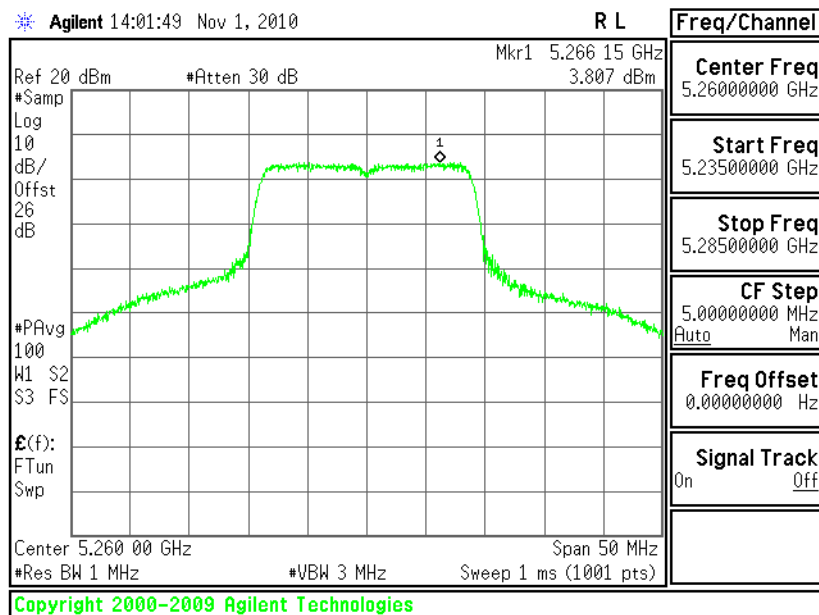


PSD Plot on 802.11n (HT-20) Channel 48 - Chain 1

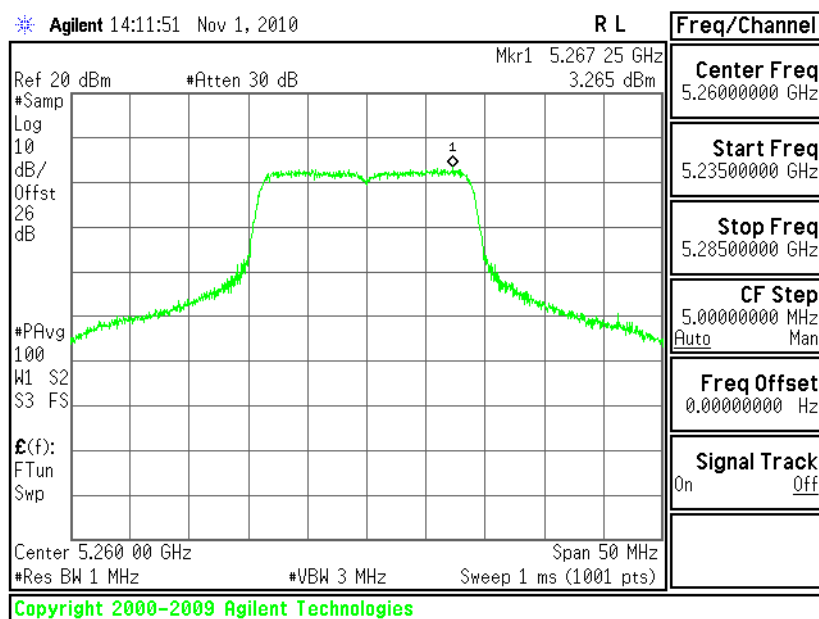




PSD Plot on 802.11n (HT-20) Channel 52 - Chain 0

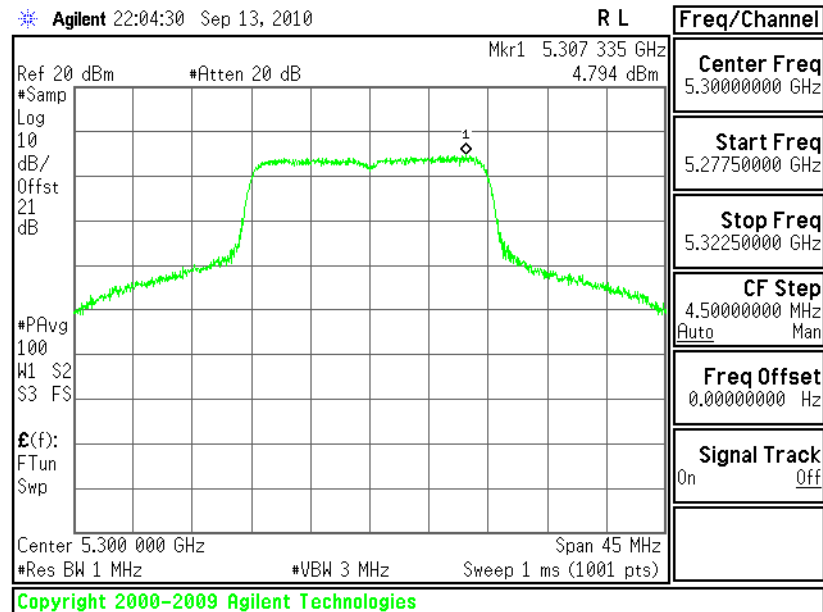


PSD Plot on 802.11n (HT-20) Channel 52 - Chain 1

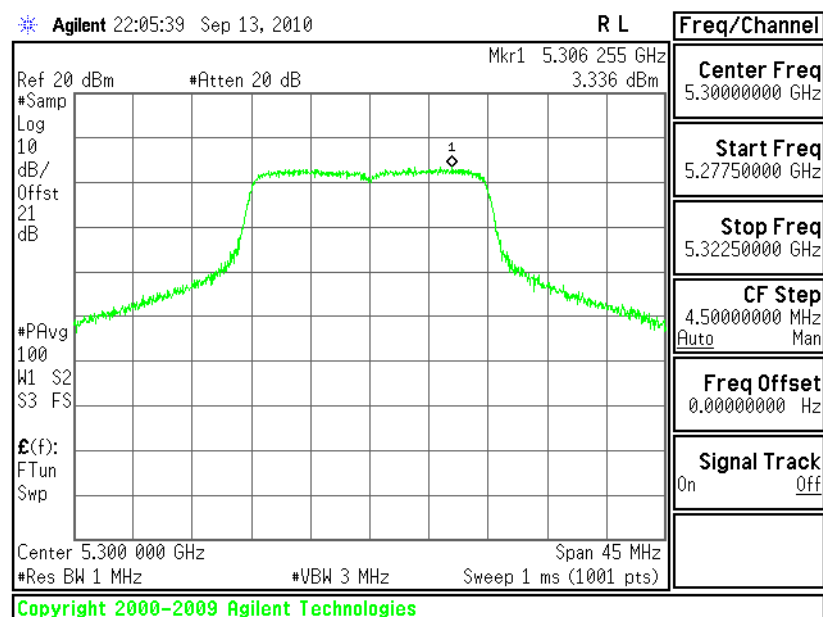




PSD Plot on 802.11n (HT-20) Channel 60 - Chain 0

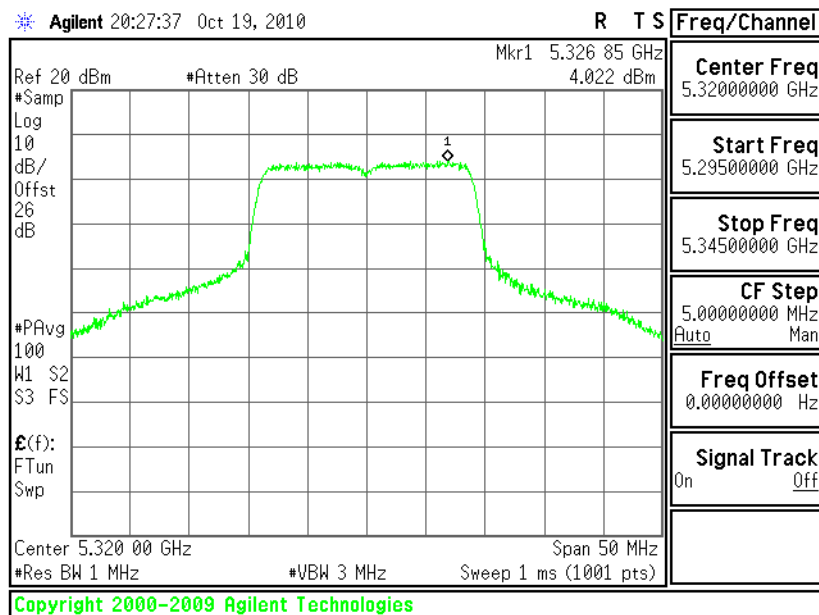


PSD Plot on 802.11n (HT-20) Channel 60 - Chain 1

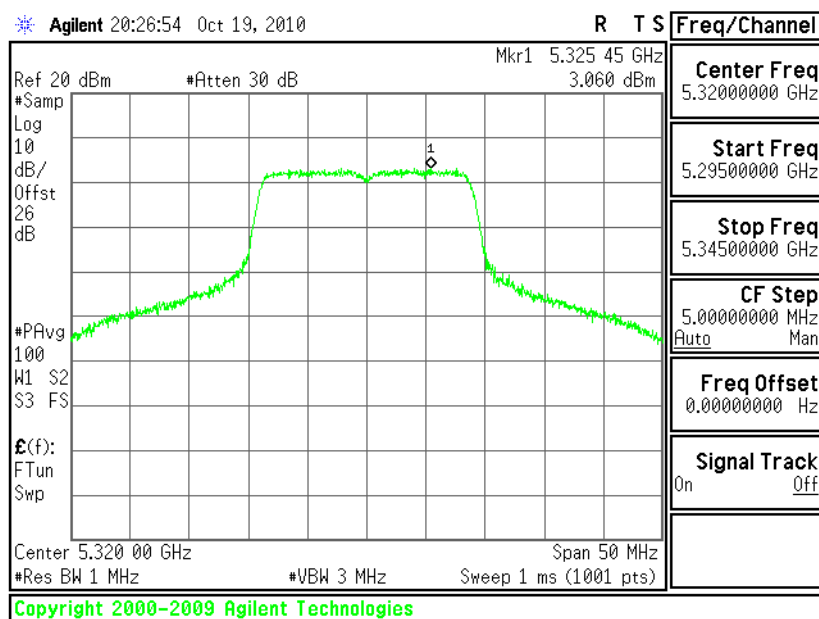




PSD Plot on 802.11n (HT-20) Channel 64 - Chain 0

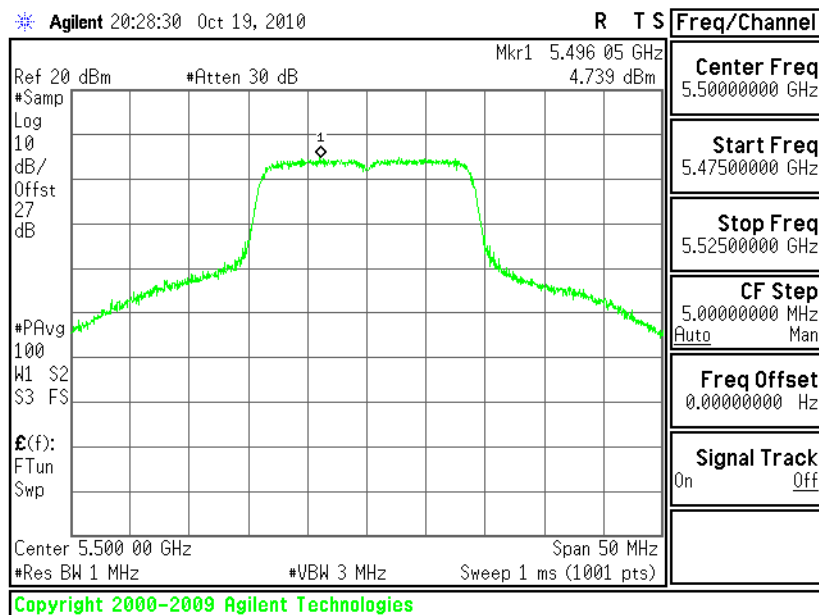


PSD Plot on 802.11n (HT-20) Channel 64 - Chain 1

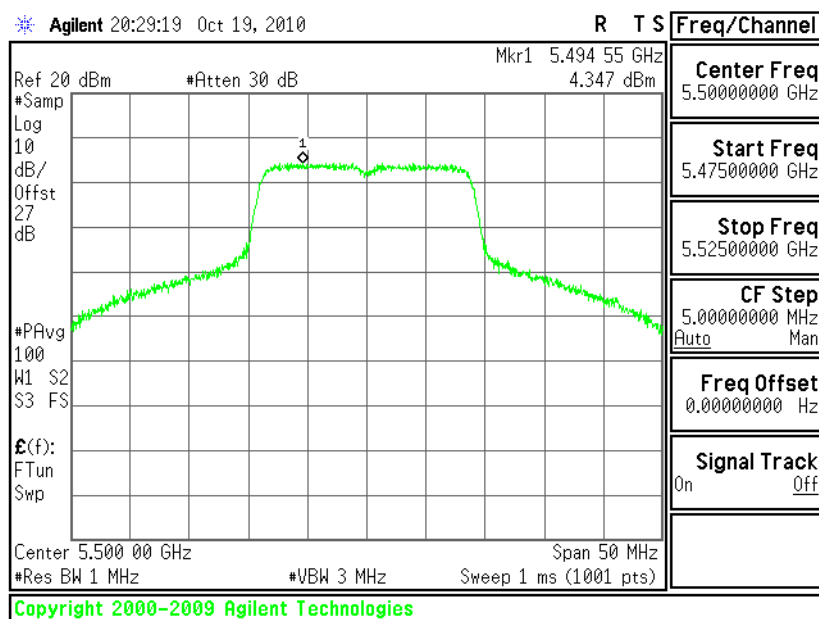




PSD Plot on 802.11n (HT-20) Channel 100 - Chain 0

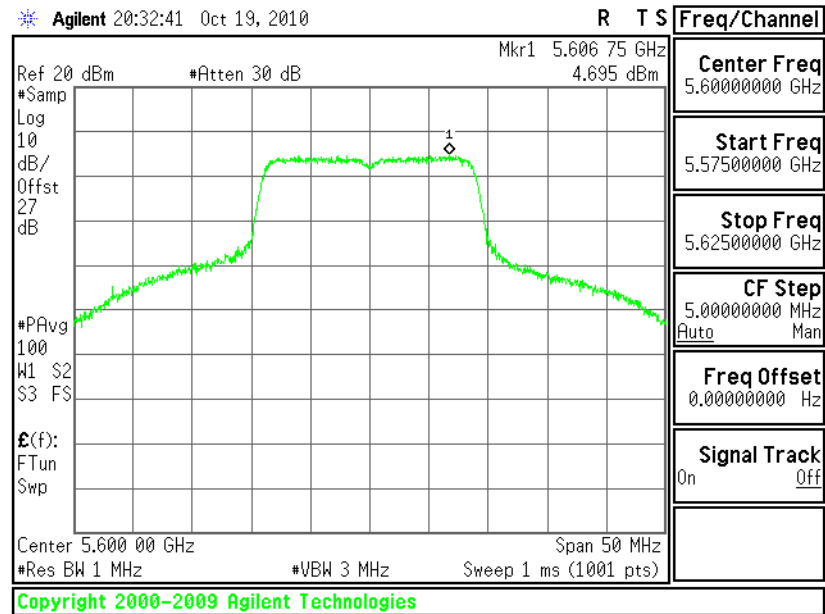


PSD Plot on 802.11n (HT-20) Channel 100 - Chain 1

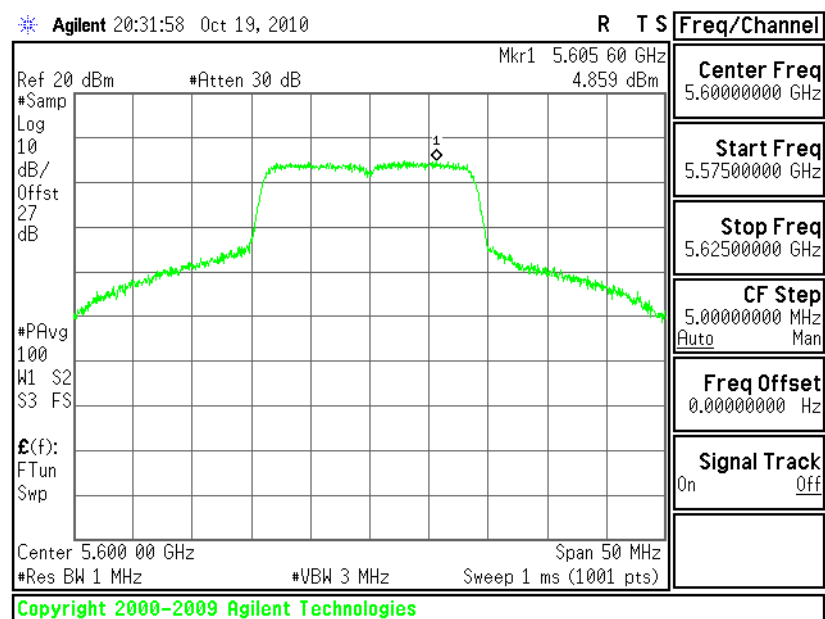




PSD Plot on 802.11n (HT-20) Channel 120 - Chain 0

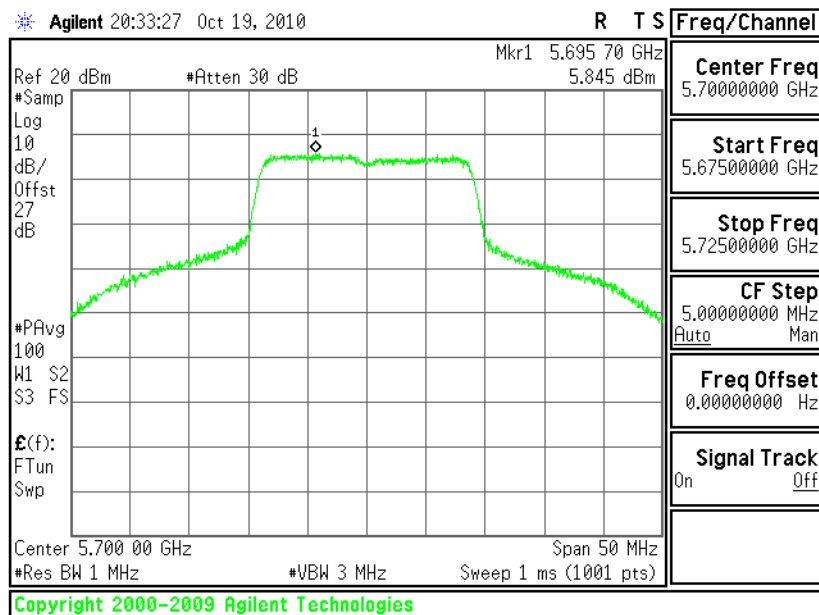


PSD Plot on 802.11n (HT-20) Channel 120 - Chain 1

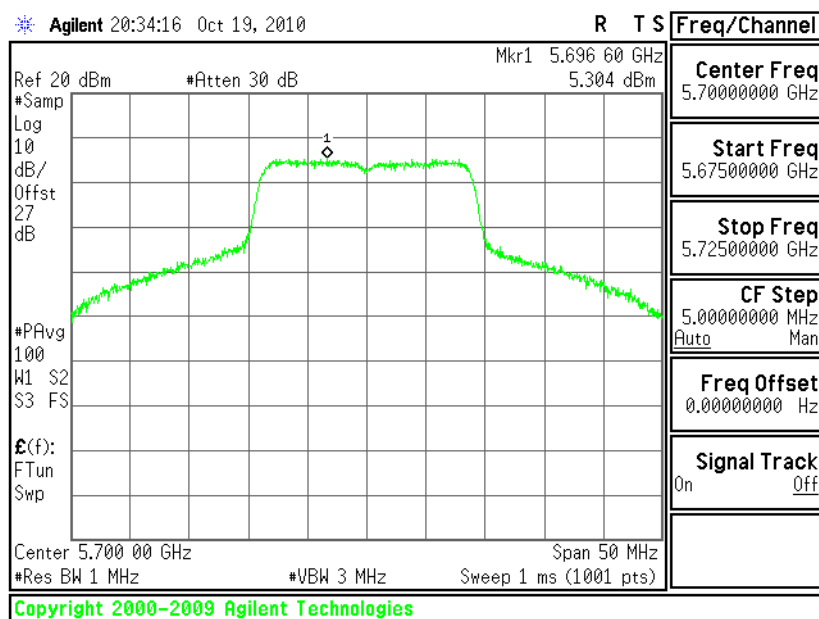




PSD Plot on 802.11n (HT-20) Channel 140 - Chain 0



PSD Plot on 802.11n (HT-20) Channel 140 - Chain 1



Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

<Beam-Forming On: 3x3>

Channel	Frequency (MHz)	802.11n (HT-40) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
38	5190	-3.74	-5.11	-5.64	0.02	2.15	Pass
46	5230	-2.64	-4.23	-5.58	0.79	2.15	Pass
54	5270	1.51	0.25	0.38	5.52	9.15	Pass
62	5310	-3.79	-5.52	-5.27	-0.02	9.15	Pass
102	5510	-4.77	-5.09	-5.75	-0.41	13.47	Pass
118	5590	1.64	0.88	-0.59	5.51	13.47	Pass
134	5670	-0.32	-0.71	-1.90	3.84	13.47	Pass

Note: The maximum composite antenna gain is 7.85 for 5150 MHz ~ 5350 MHz and 9.53 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 2.15 dBm for 5150 MHz ~ 5250 MHz, 9.15 dBm for 5250 MHz ~ 5350 MHz and 13.47 dBm for 5470 MHz ~ 5725 MHz.

<Beam-Forming On: 2x3>

Channel	Frequency (MHz)	802.11n (HT-40) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
38	5190	-3.11	-4.39	-0.69	3.91	Pass
46	5230	1.29	-0.78	3.39	3.91	Pass
54	5270	1.58	0.03	3.88	10.91	Pass
62	5310	-3.68	-4.72	-1.16	10.91	Pass
102	5510	0.20	-0.19	3.02	15.23	Pass
118	5590	1.40	0.80	4.12	15.23	Pass
134	5670	1.34	0.99	4.18	15.23	Pass

Note: The maximum composite antenna gain is 6.09 for 5150 MHz ~ 5350 MHz and 7.77 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 3.91 dBm for 5150 MHz ~ 5250 MHz, 10.91 dBm for 5250 MHz ~ 5350 MHz and 15.23 dBm for 5470 MHz ~ 5725 MHz.

<Beam-Forming Off: 3x3>

Channel	Frequency (MHz)	802.11n (HT-40) Measured PSD (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
38	5190	-0.26	-1.61	-3.16	3.25	4.00	Pass
46	5230	-0.67	-1.89	-3.1	3.00	4.00	Pass
54	5270	1.28	-0.77	-0.91	4.76	11.00	Pass
62	5310	-3.79	-5.52	-5.27	-0.02	11.00	Pass
102	5510	-4.77	-5.09	-5.75	-0.41	17.00	Pass
118	5590	0.51	-0.49	-1.51	4.35	17.00	Pass
134	5670	-0.32	-0.71	-1.90	3.84	17.00	Pass

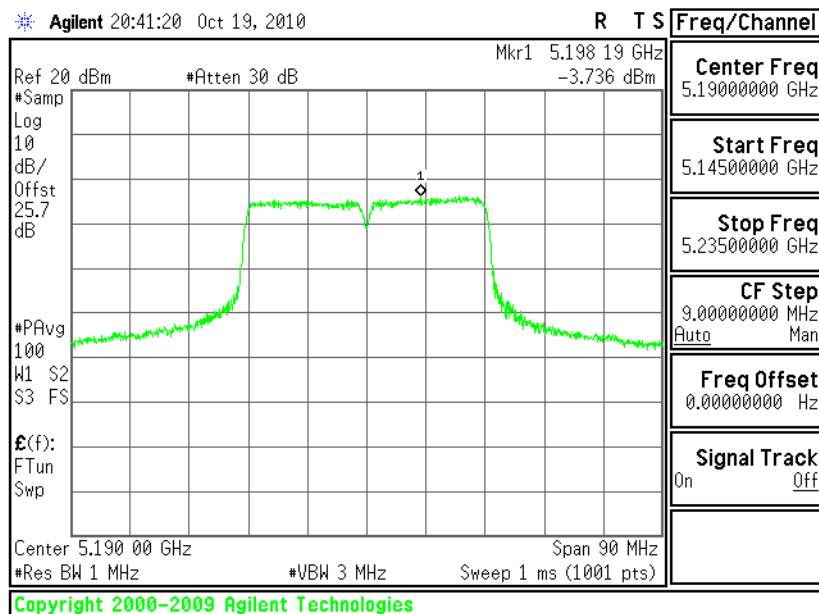
<Beam-Forming Off: 2x3>

Channel	Frequency (MHz)	802.11n (HT-40) Measured PSD (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
38	5190	-0.26	-1.61	2.13	4.00	Pass
46	5230	-0.67	-1.89	1.77	4.00	Pass
54	5270	1.28	-0.77	3.39	11.00	Pass
62	5310	-3.79	-5.52	-1.56	11.00	Pass
102	5510	-4.77	-5.09	-1.92	17.00	Pass
118	5590	0.51	-0.49	3.05	17.00	Pass
134	5670	-0.32	-0.71	2.50	17.00	Pass

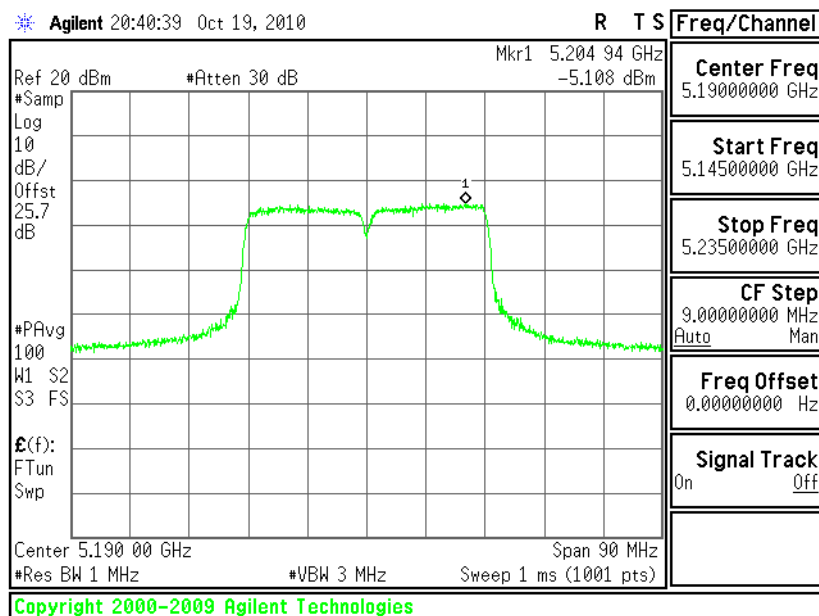


<Beam-Forming On: 3x3>

PSD Plot on 802.11n (HT-40) Channel 38 - Chain 0

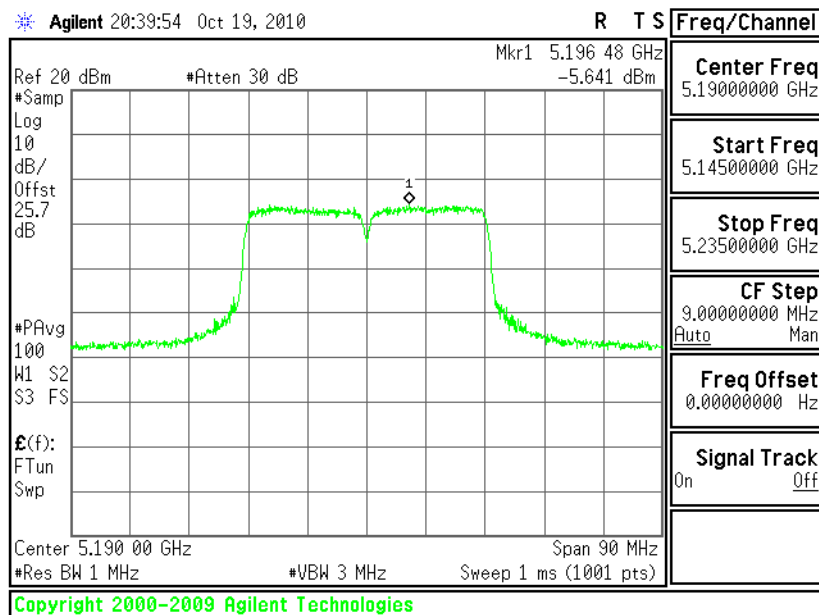


PSD Plot on 802.11n (HT-40) Channel 38 - Chain 1

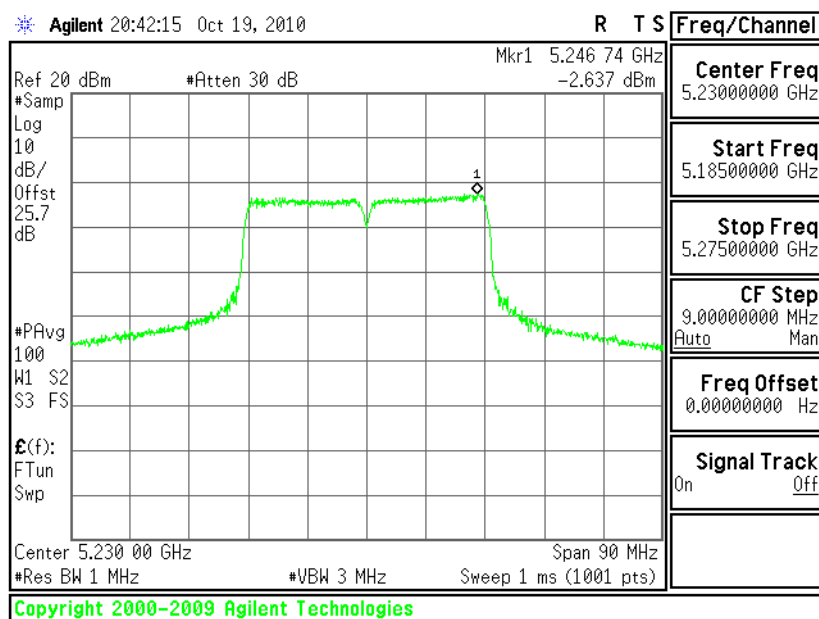




PSD Plot on 802.11n (HT-40) Channel 38 - Chain 2

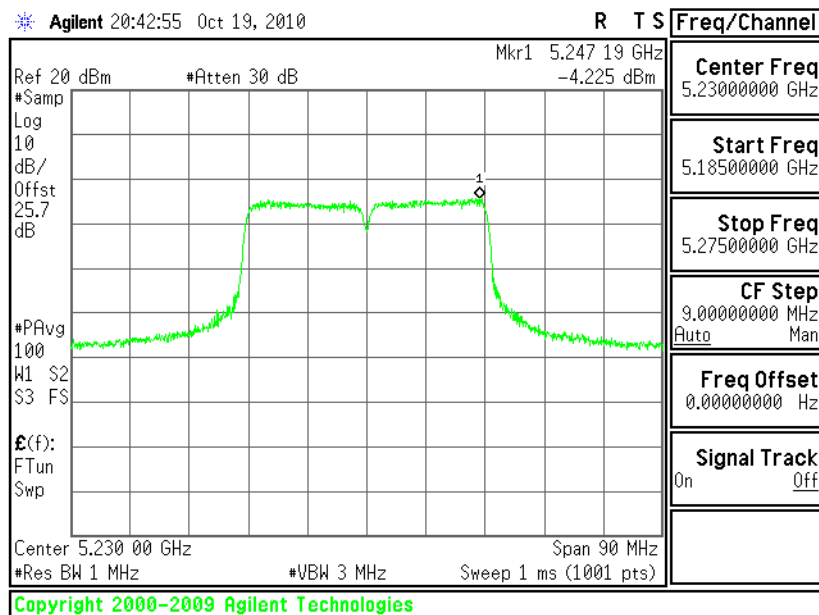


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 0

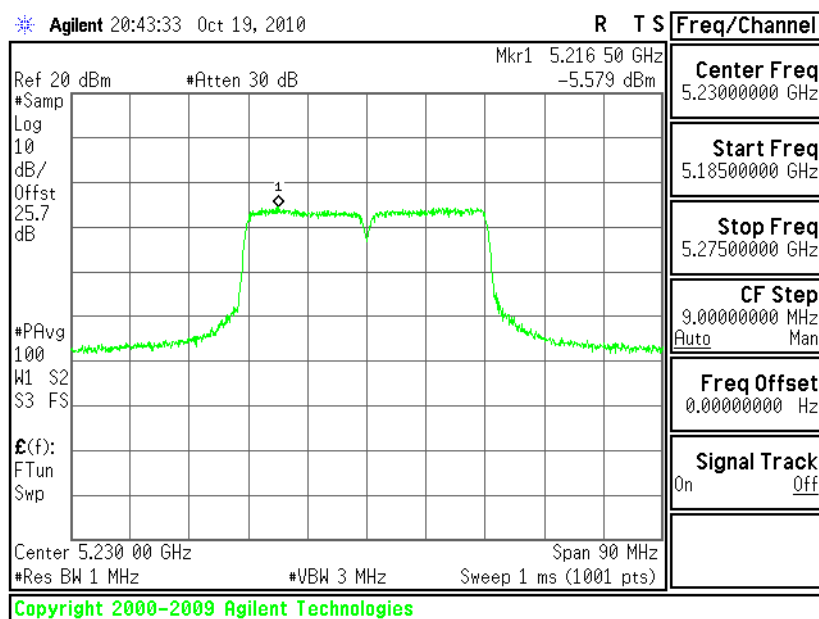




PSD Plot on 802.11n (HT-40) Channel 46 - Chain 1

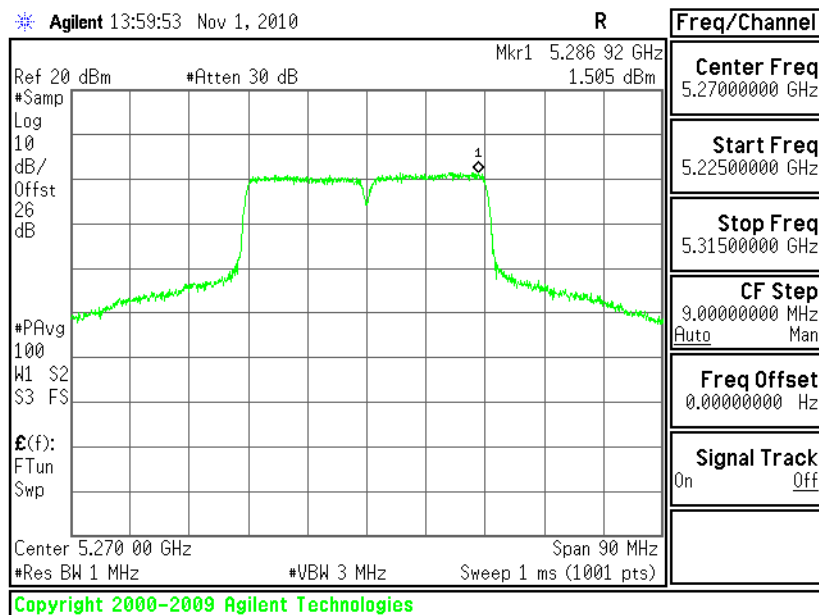


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 2

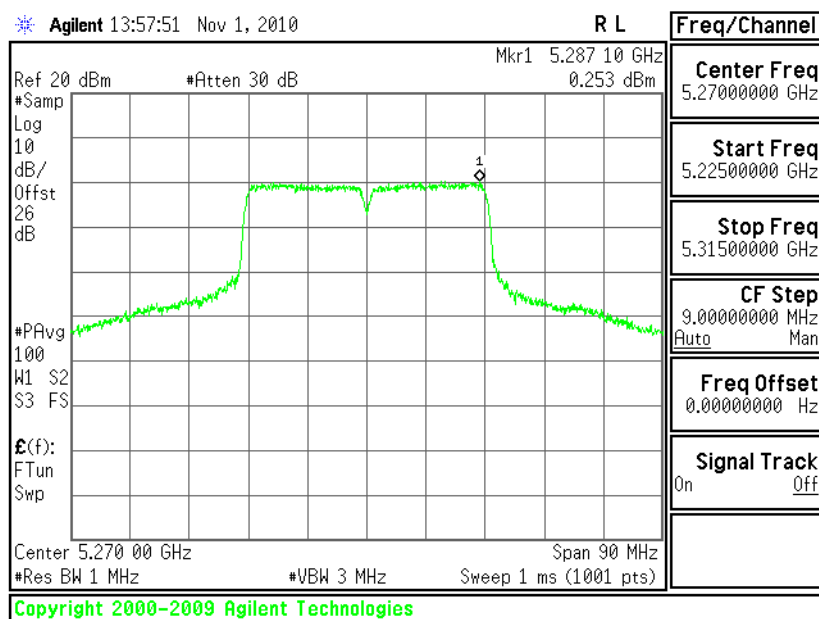




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 0

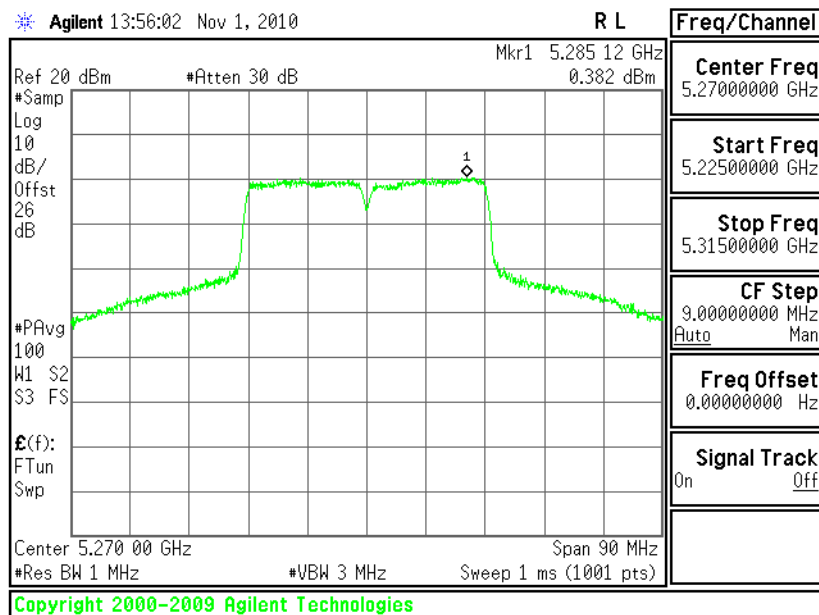


PSD Plot on 802.11n (HT-40) Channel 54 - Chain 1

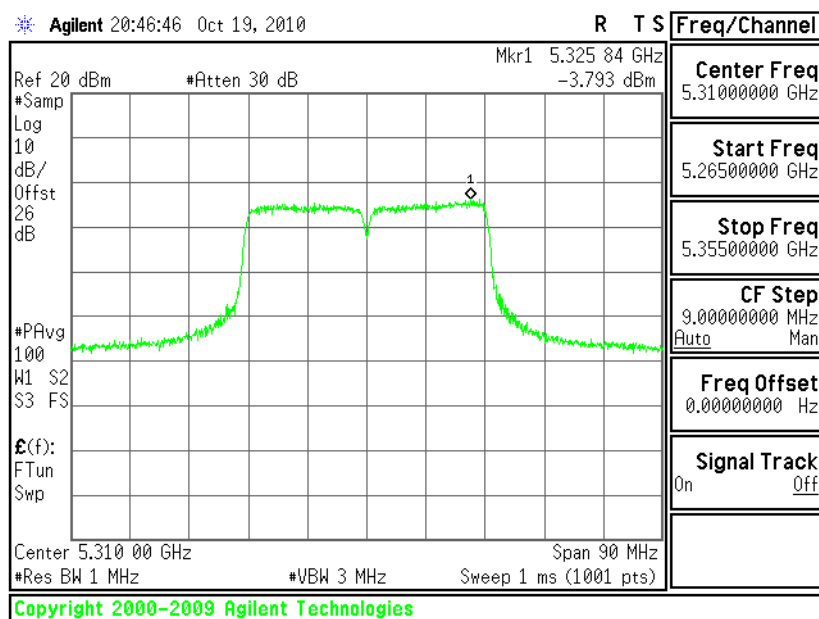




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 2

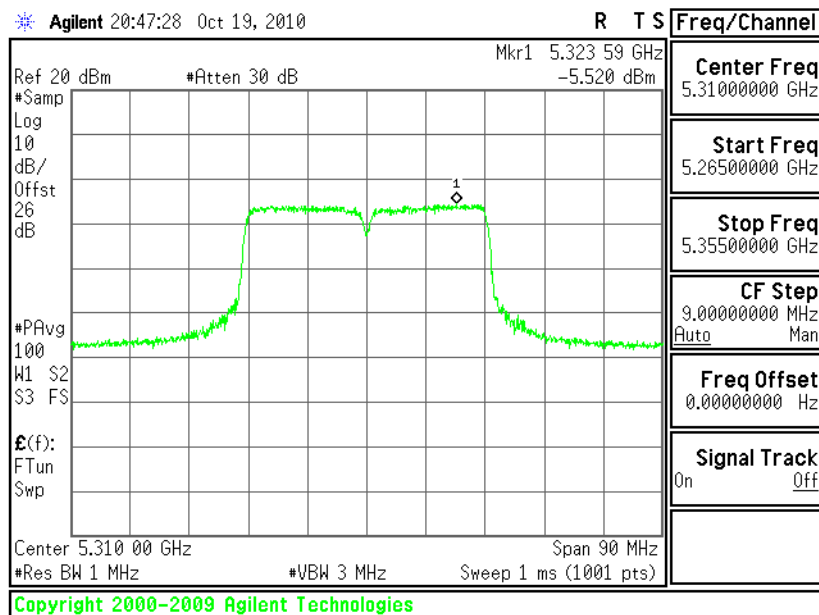


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 0

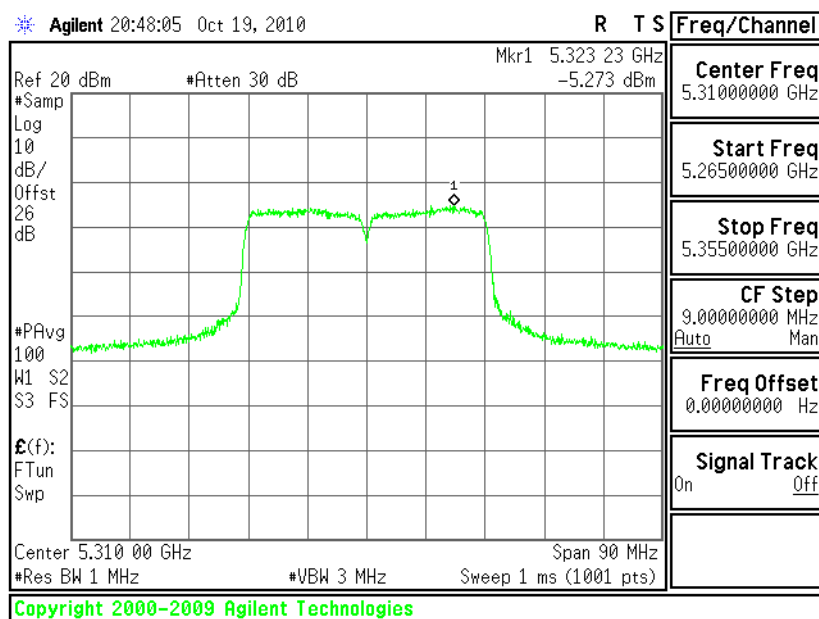




PSD Plot on 802.11n (HT-40) Channel 62 - Chain 1

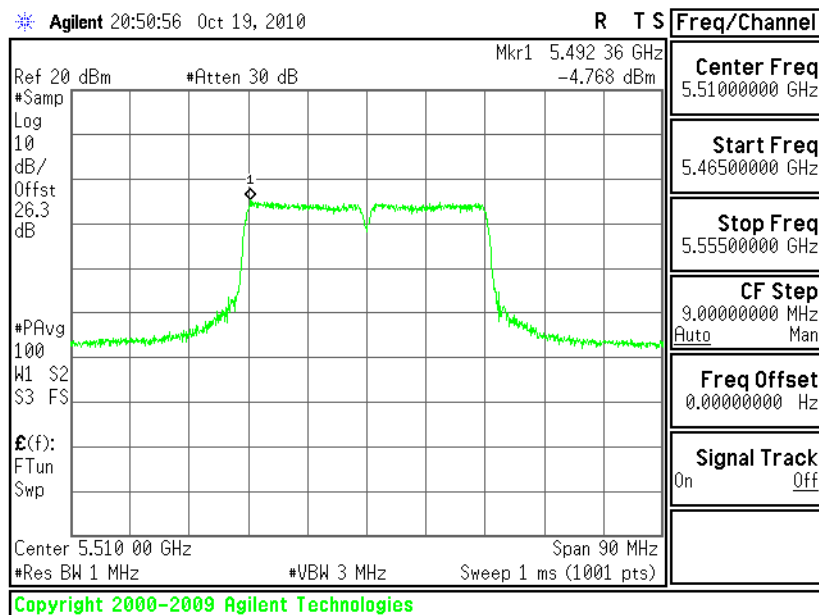


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 2

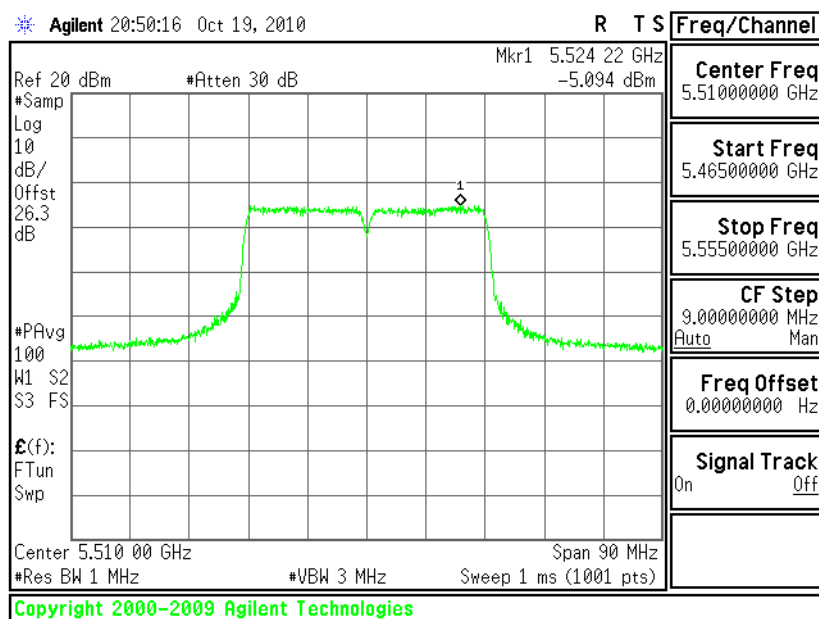




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 0

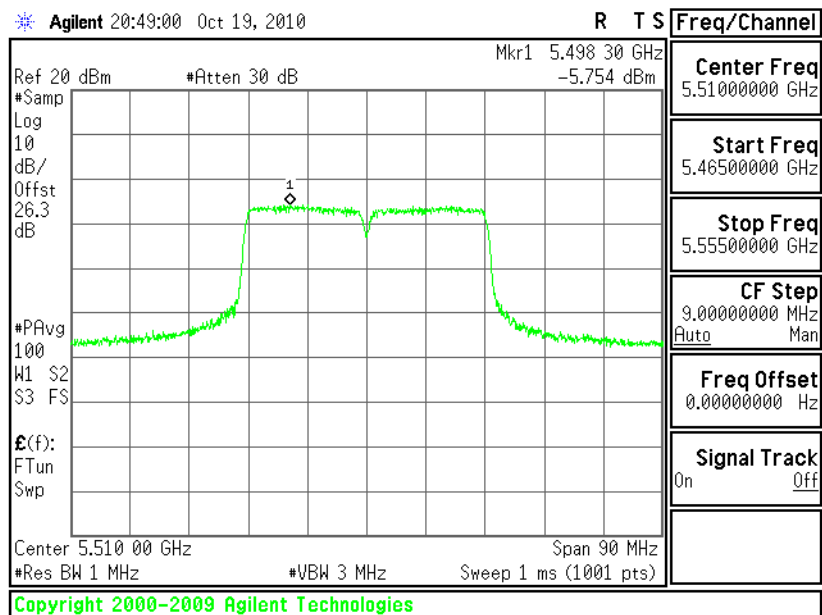


PSD Plot on 802.11n (HT-40) Channel 102 - Chain 1

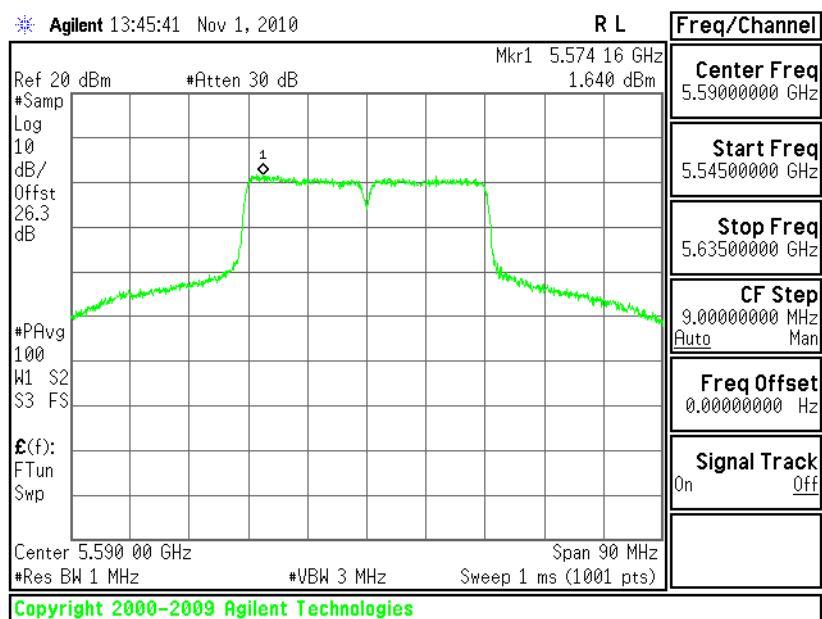




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 2

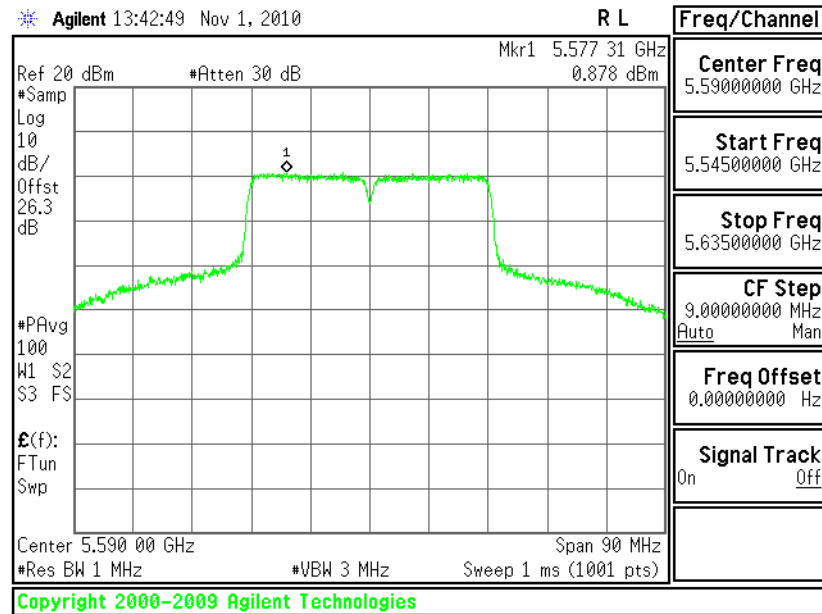


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 0

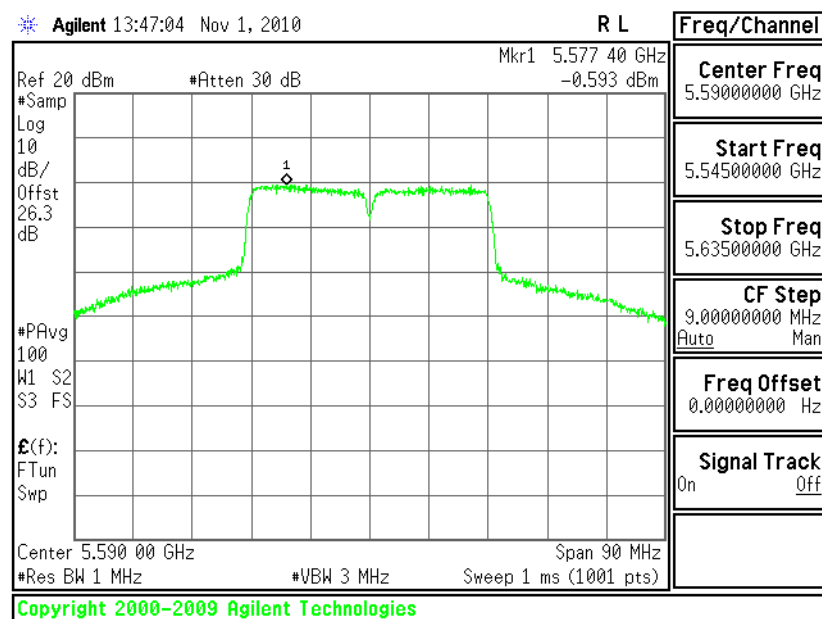




PSD Plot on 802.11n (HT-40) Channel 118 - Chain 1

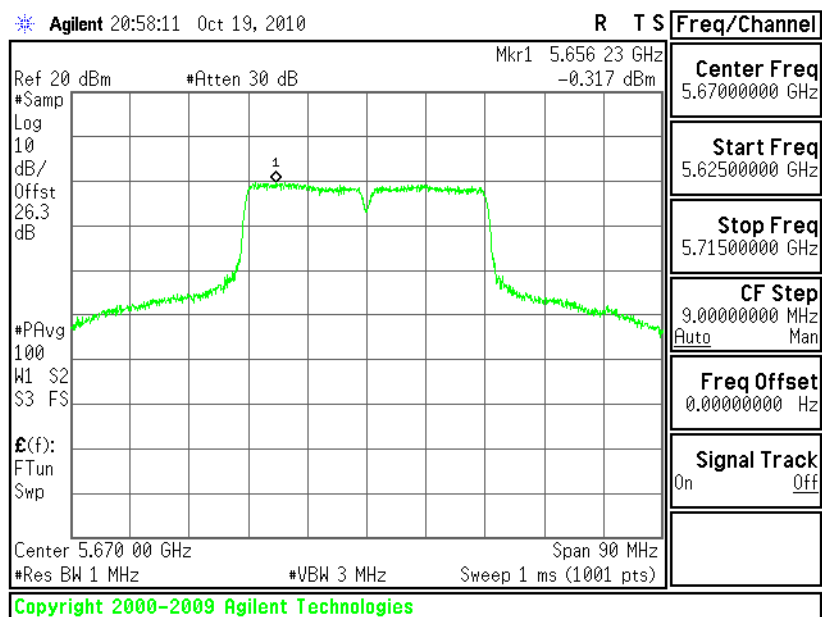


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 2

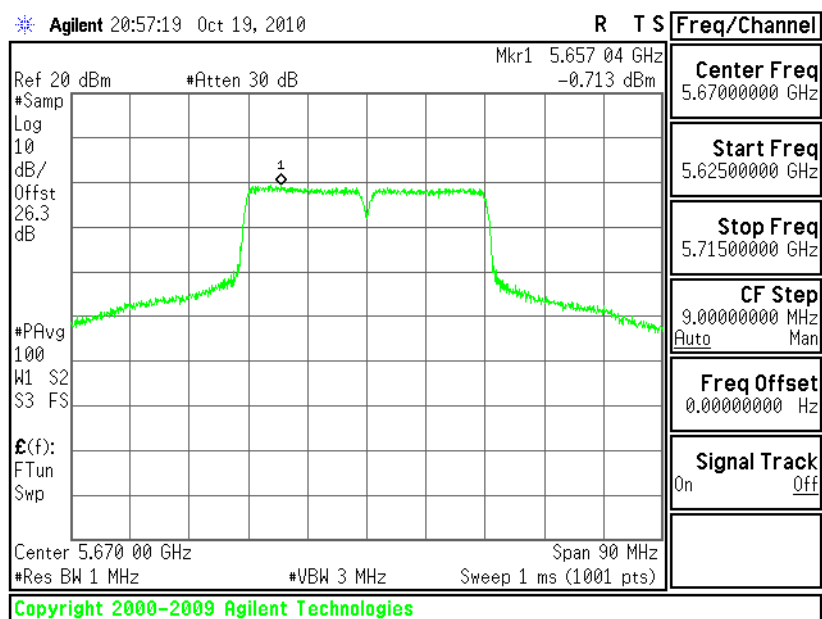




PSD Plot on 802.11n (HT-40) Channel 134 - Chain 0

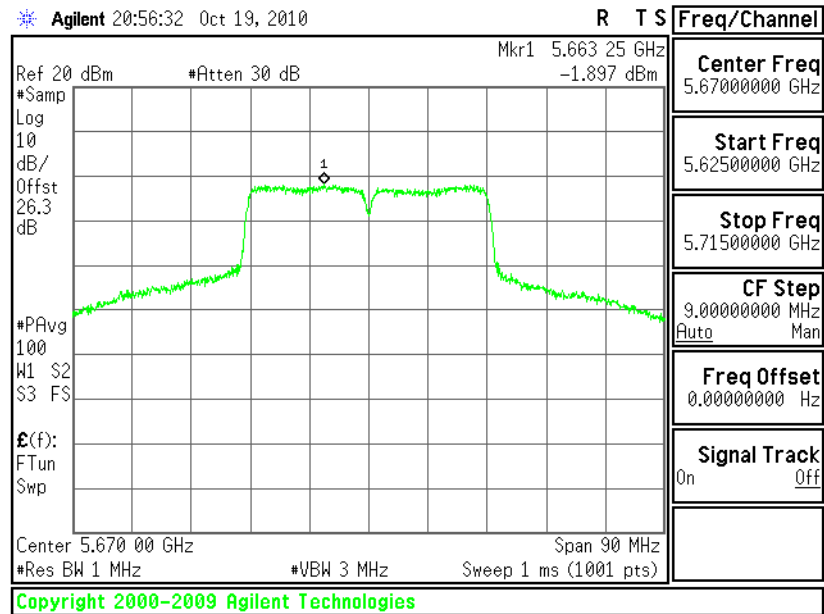


PSD Plot on 802.11n (HT-40) Channel 134 - Chain 1





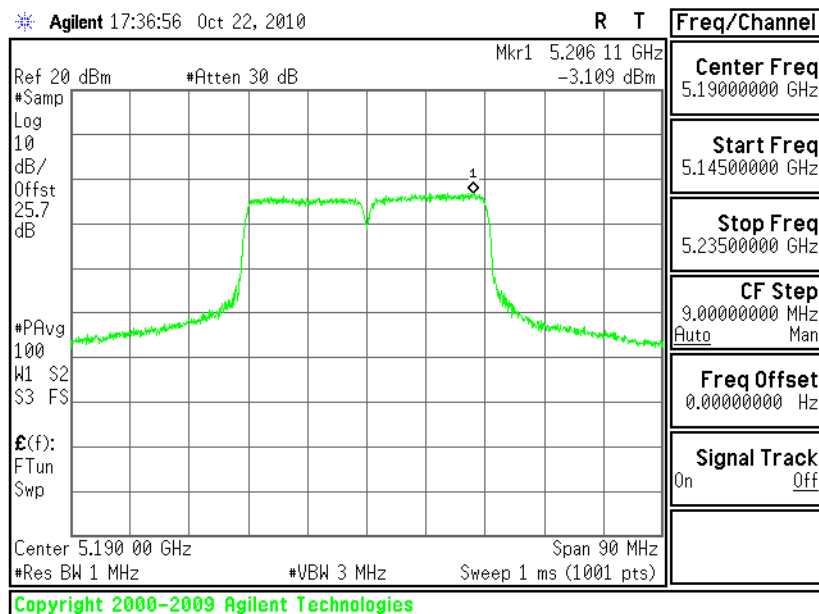
PSD Plot on 802.11n (HT-40) Channel 134 - Chain 2



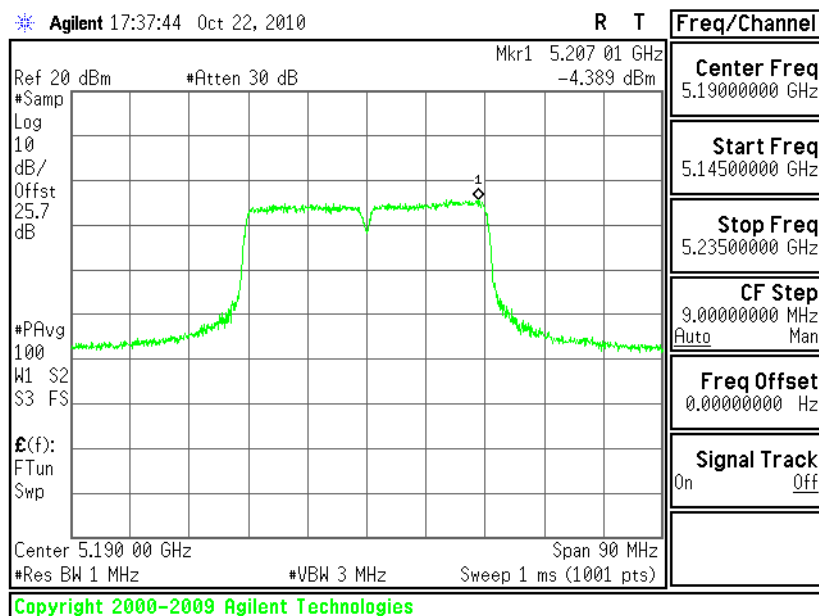


<Beam-Forming On: 2x3>

PSD Plot on 802.11n (HT-40) Channel 38 - Chain 0

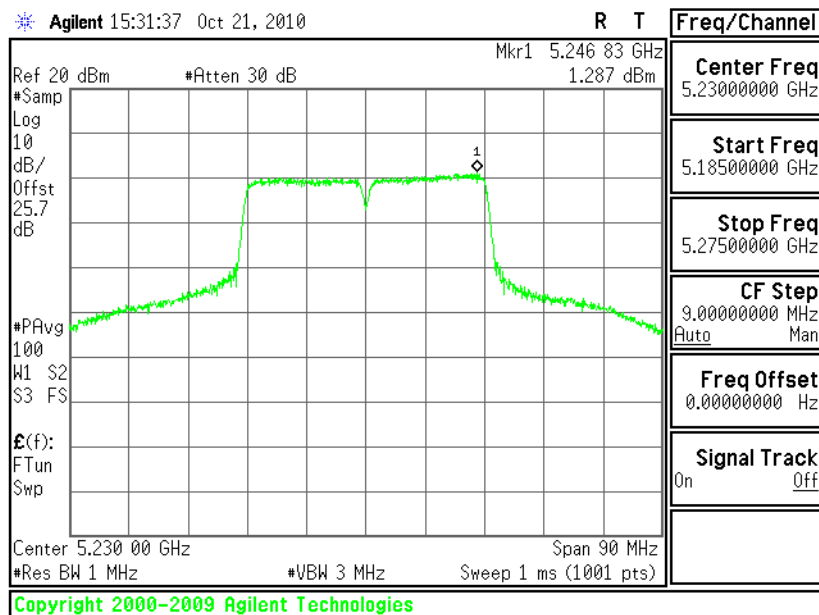


PSD Plot on 802.11n (HT-40) Channel 38 - Chain 1

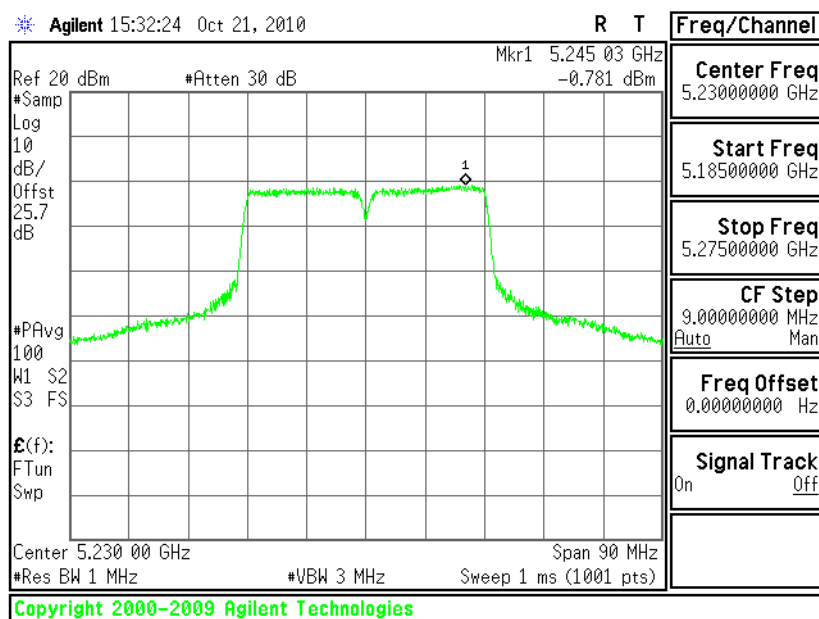




PSD Plot on 802.11n (HT-40) Channel 46 - Chain 0

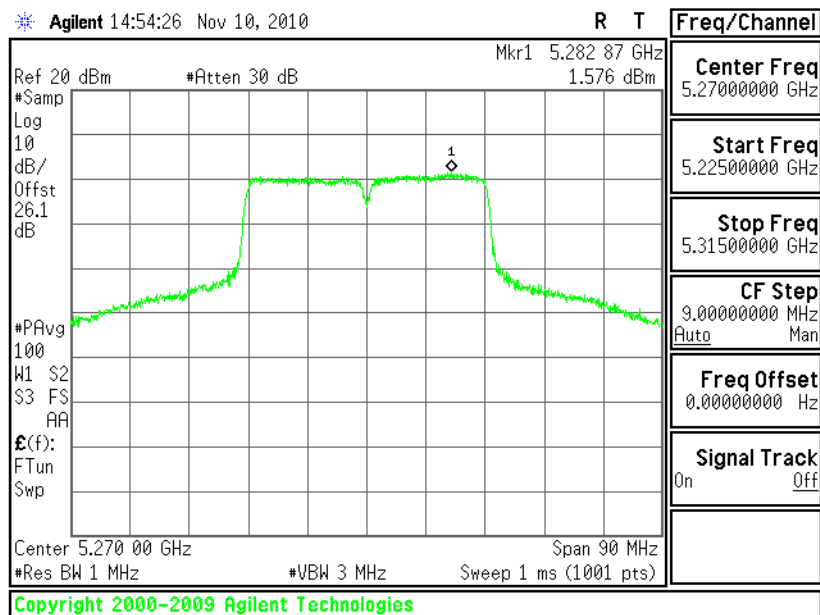


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 1

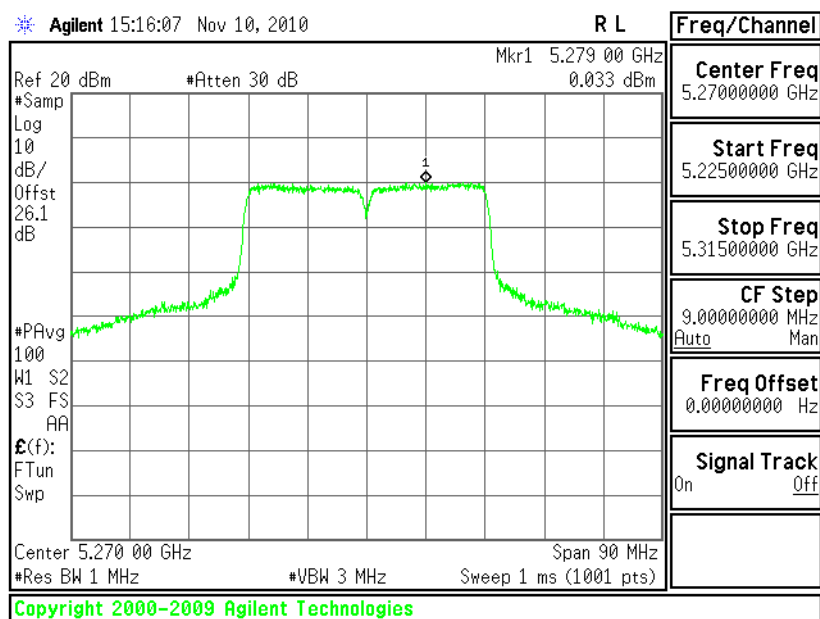




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 0

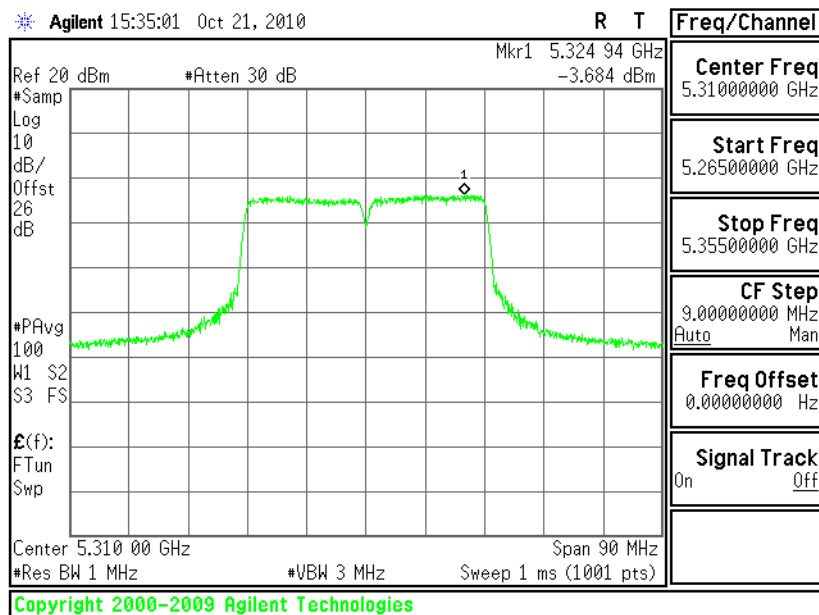


PSD Plot on 802.11n (HT-40) Channel 54 - Chain 1

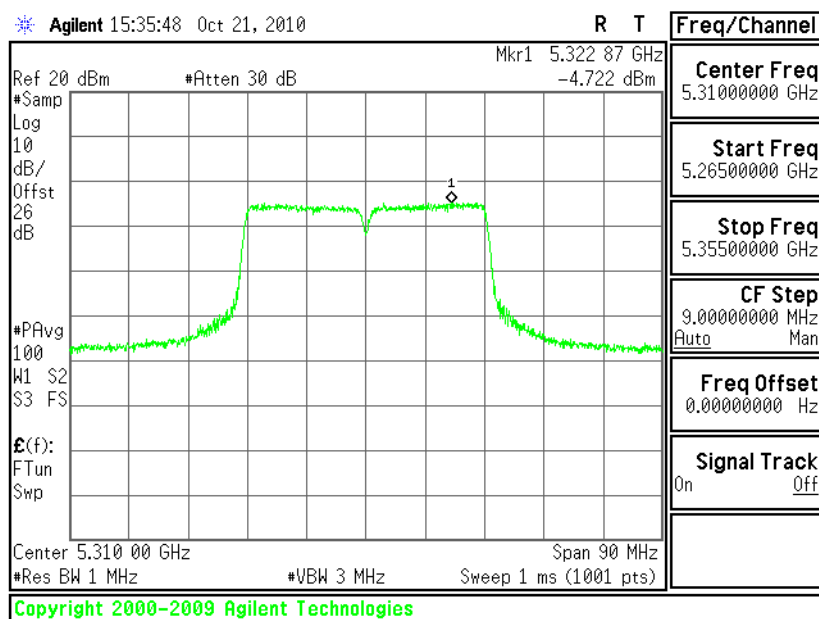




PSD Plot on 802.11n (HT-40) Channel 62 - Chain 0

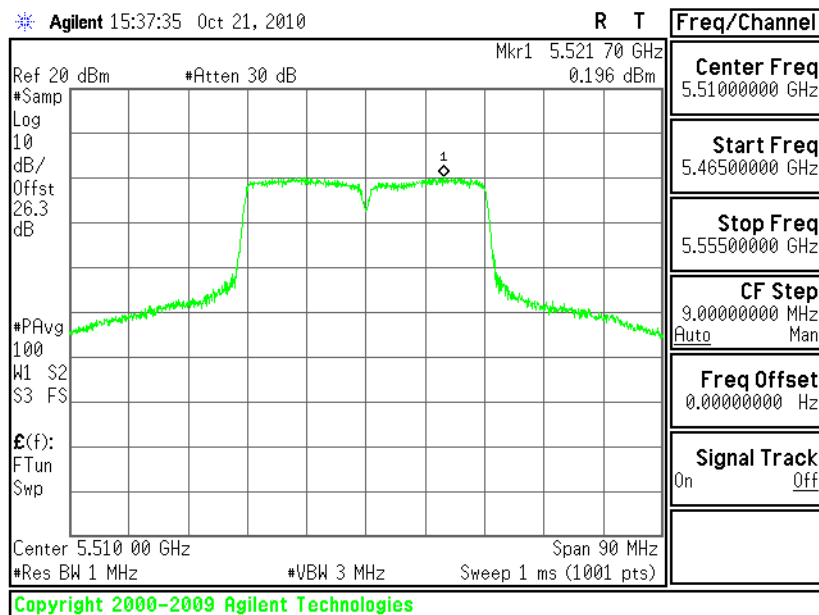


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 1

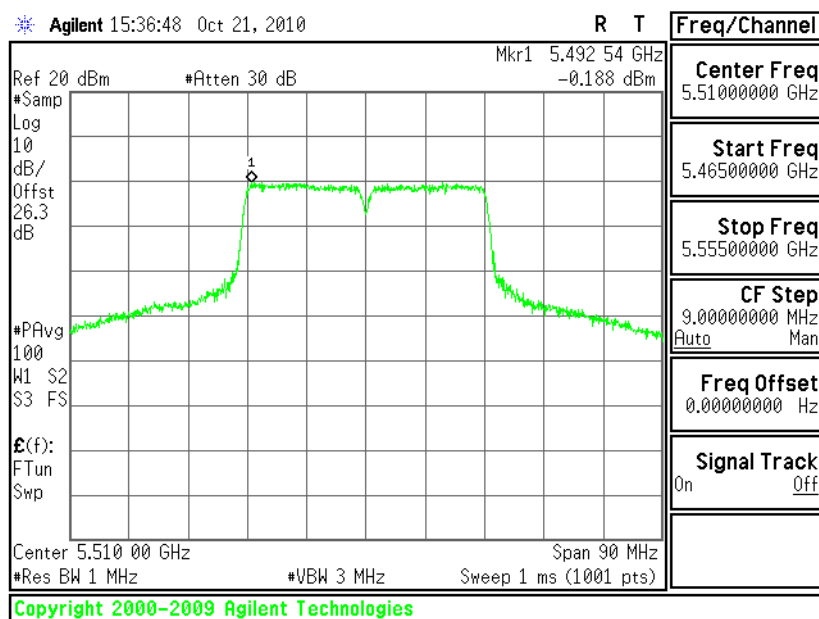




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 0

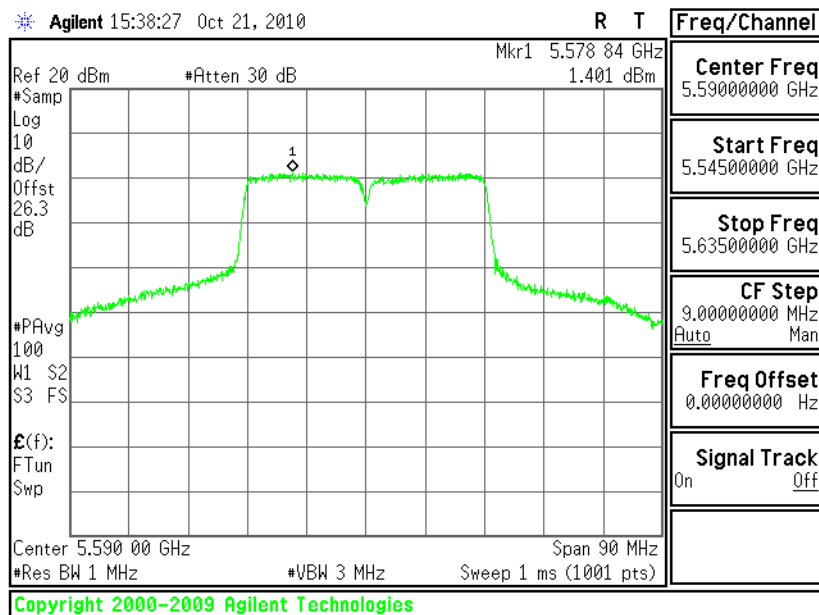


PSD Plot on 802.11n (HT-40) Channel 102 - Chain 1

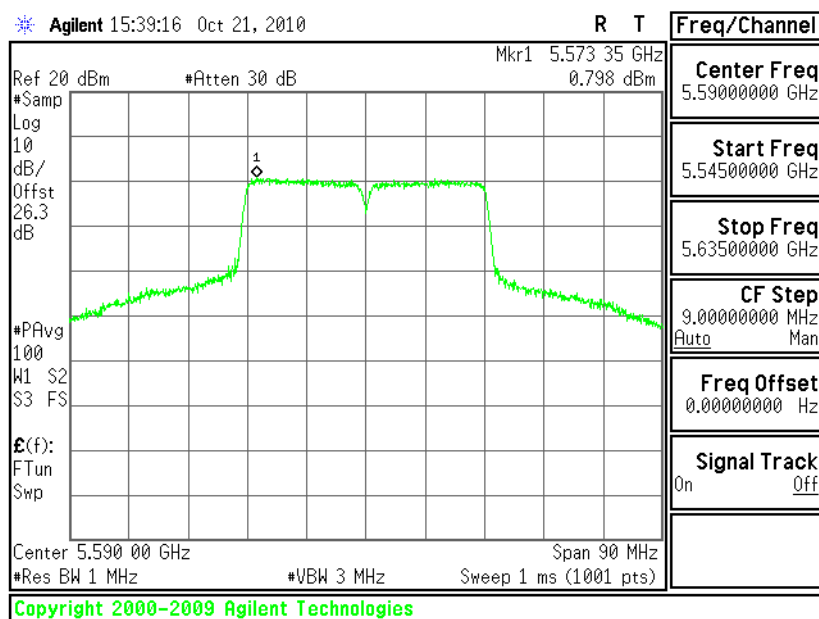




PSD Plot on 802.11n (HT-40) Channel 118 - Chain 0

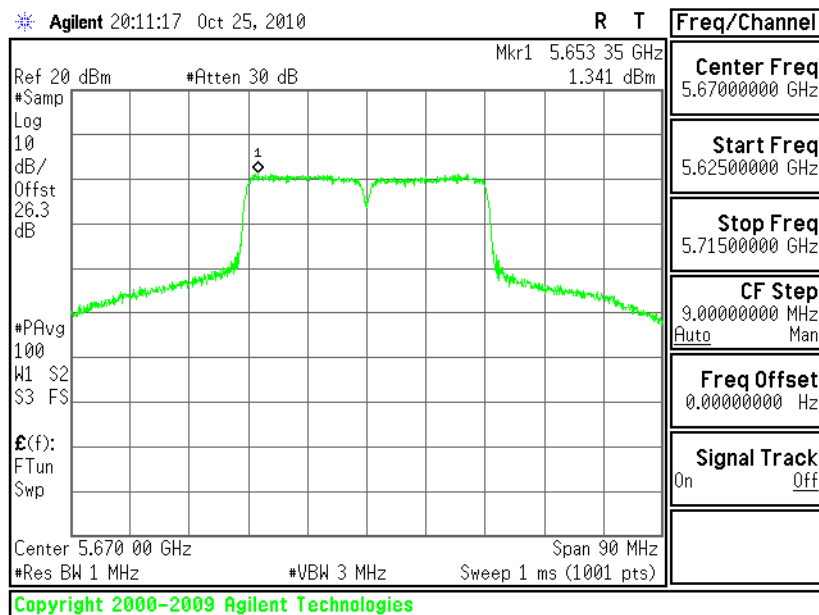


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 1

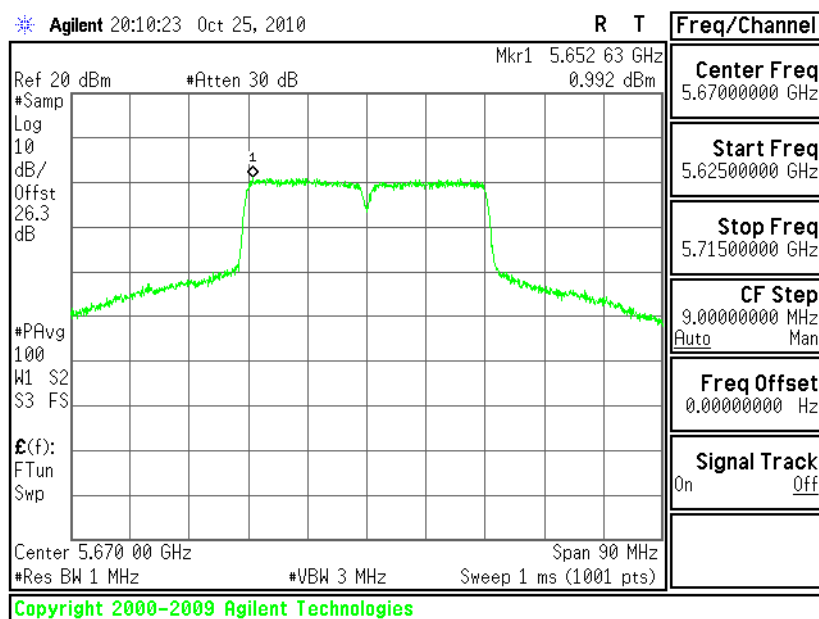




PSD Plot on 802.11n (HT-40) Channel 134 - Chain 0



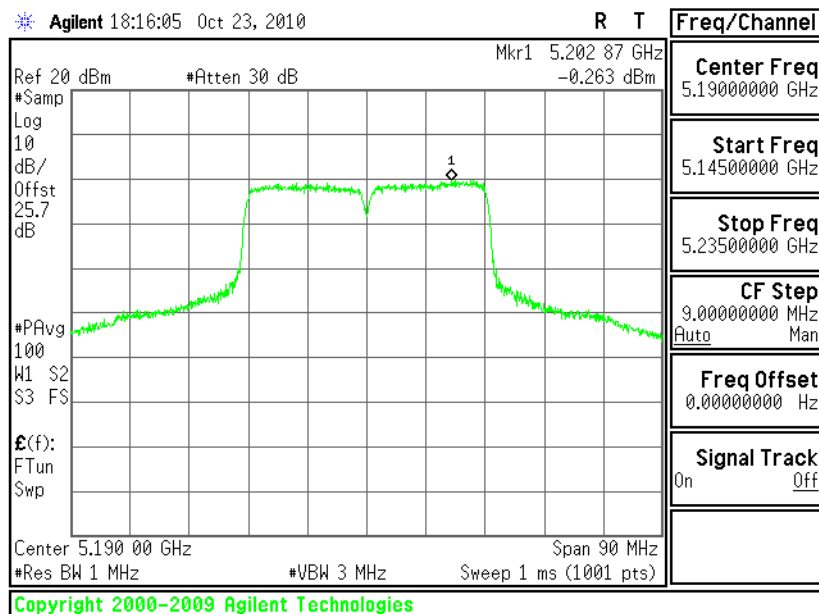
PSD Plot on 802.11n (HT-40) Channel 134 - Chain 1



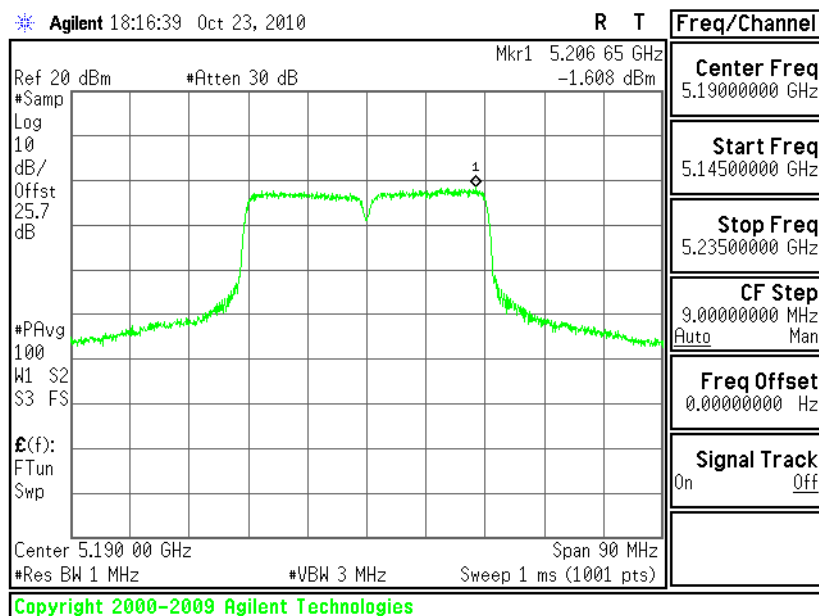


<Beam-Forming Off: 3x3>

PSD Plot on 802.11n (HT-40) Channel 38 - Chain 0

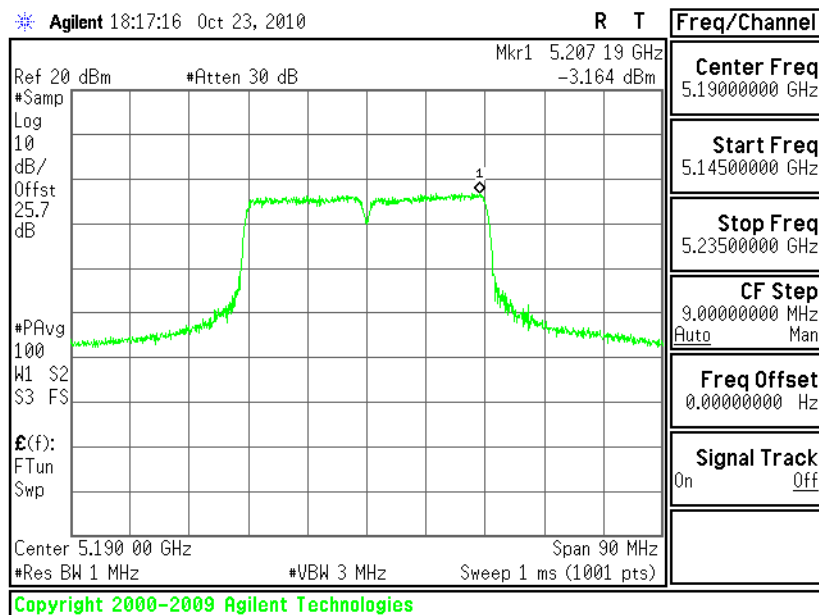


PSD Plot on 802.11n (HT-40) Channel 38 - Chain 1

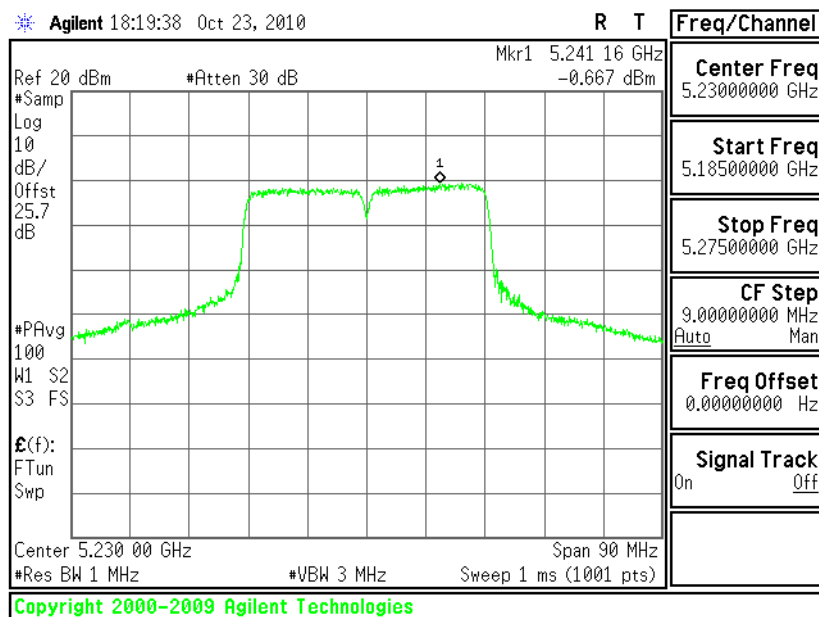




PSD Plot on 802.11n (HT-40) Channel 38 - Chain 2

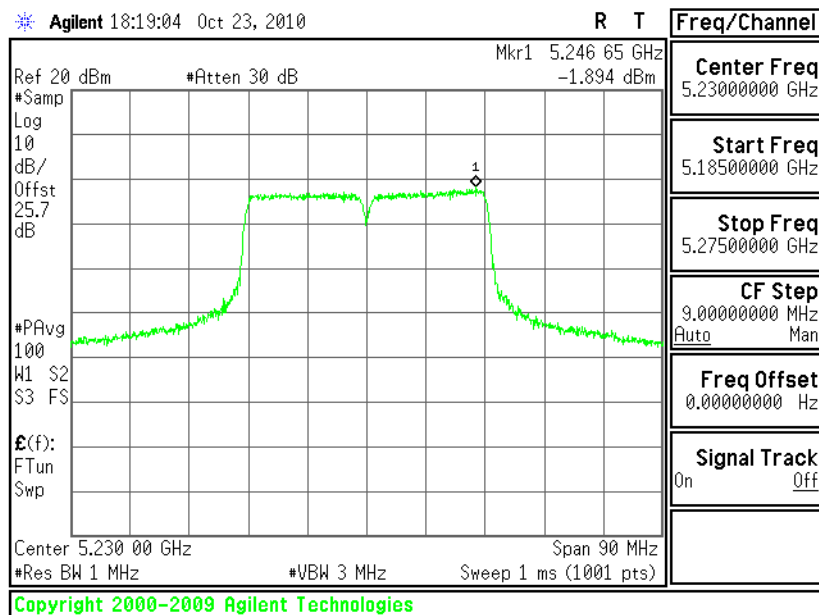


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 0

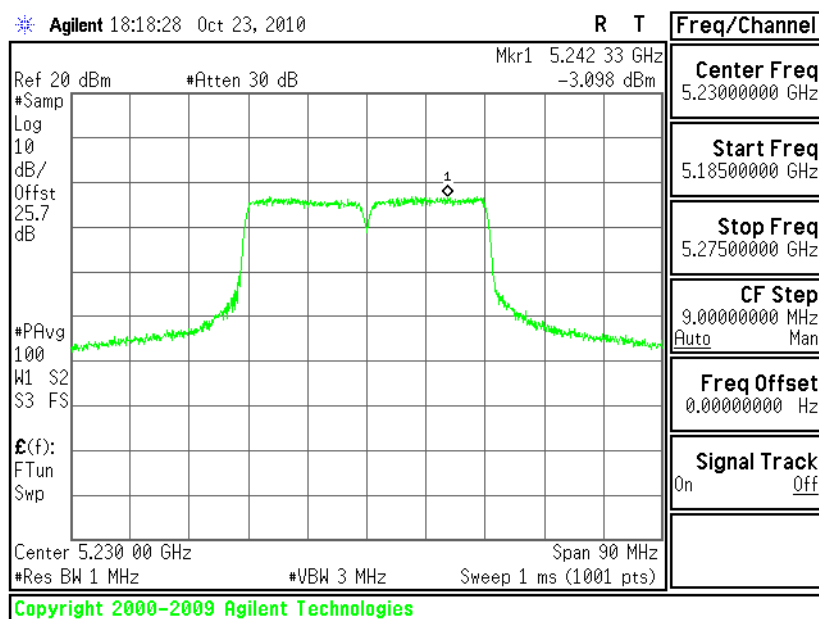




PSD Plot on 802.11n (HT-40) Channel 46 - Chain 1

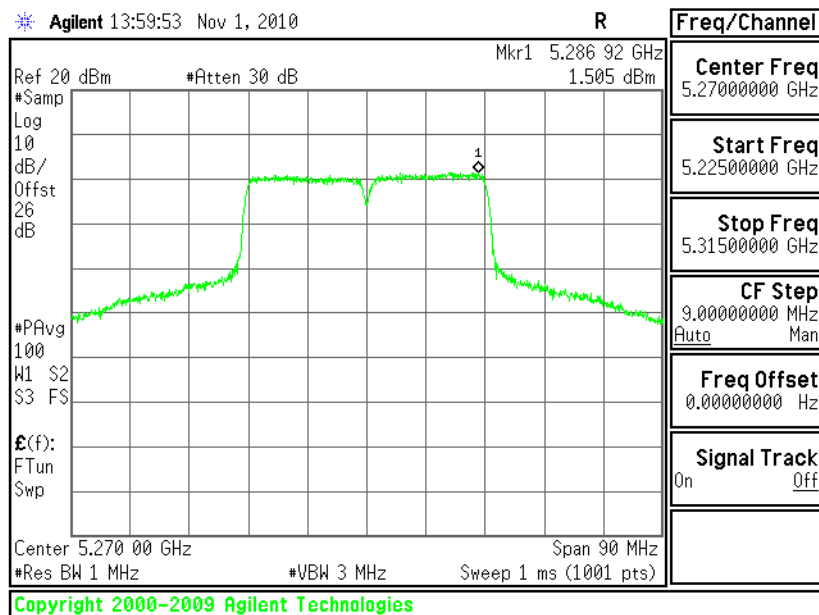


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 2

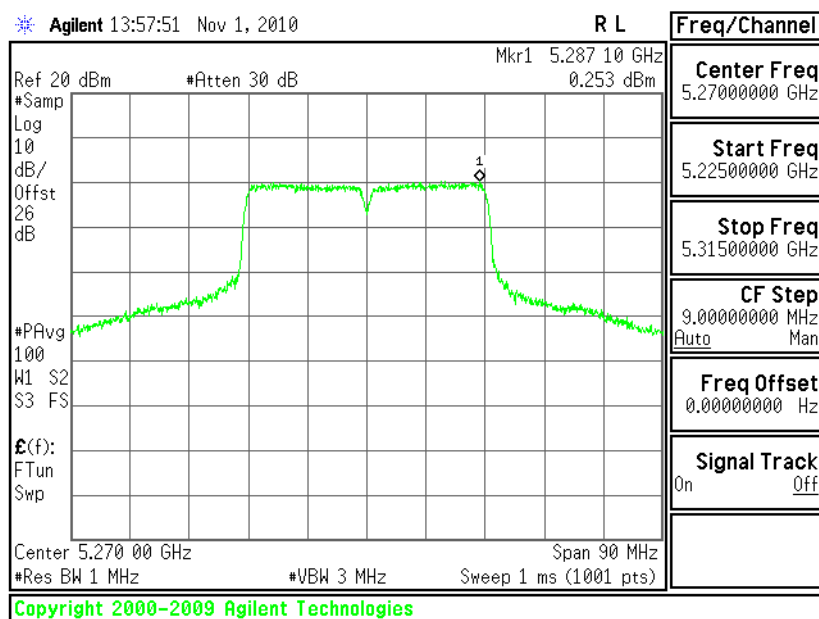




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 0

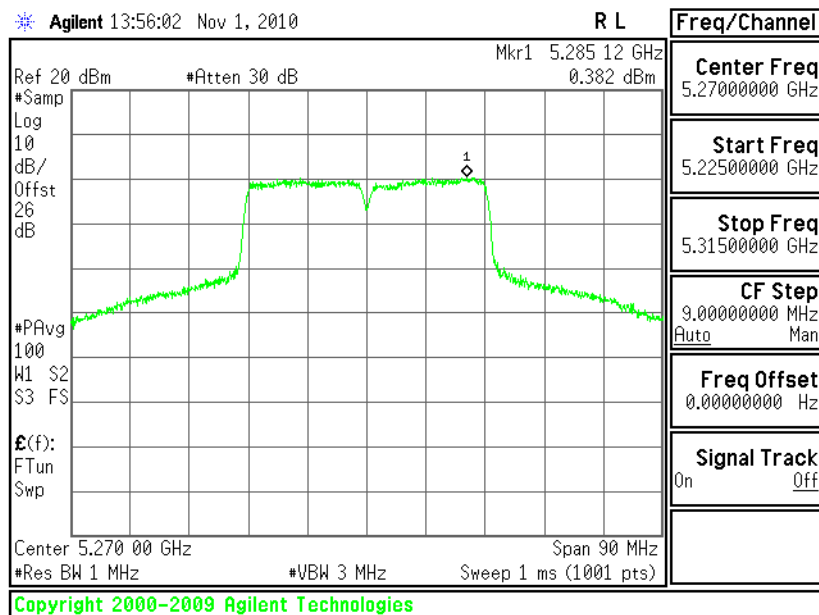


PSD Plot on 802.11n (HT-40) Channel 54 - Chain 1

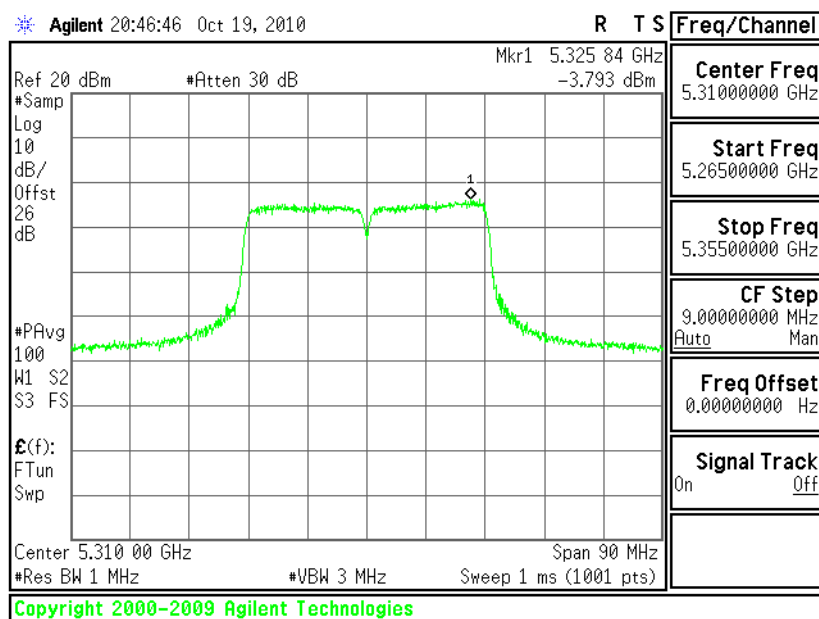




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 2

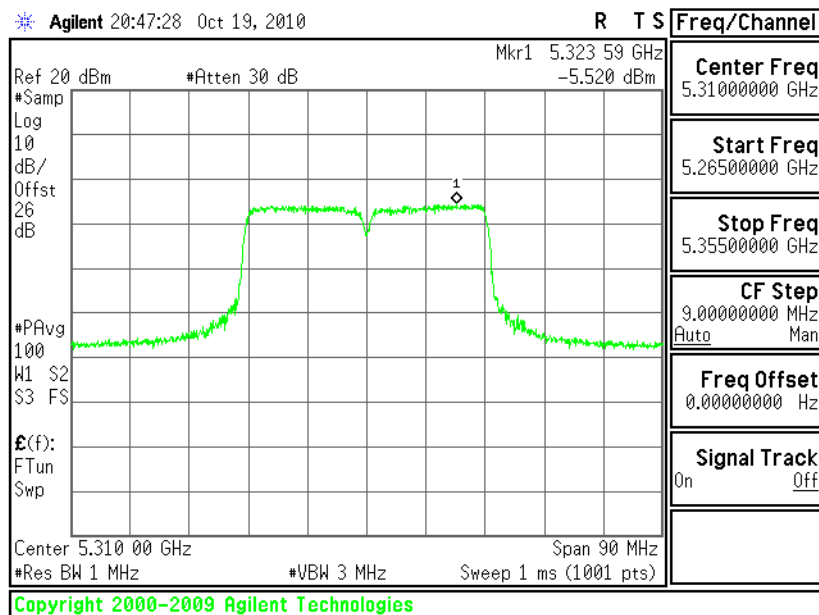


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 0

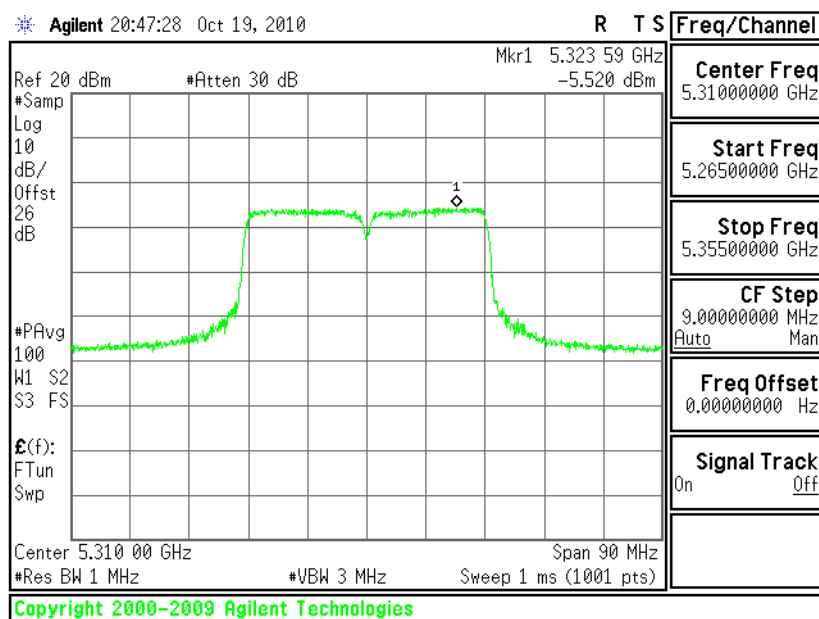




PSD Plot on 802.11n (HT-40) Channel 62 - Chain 1

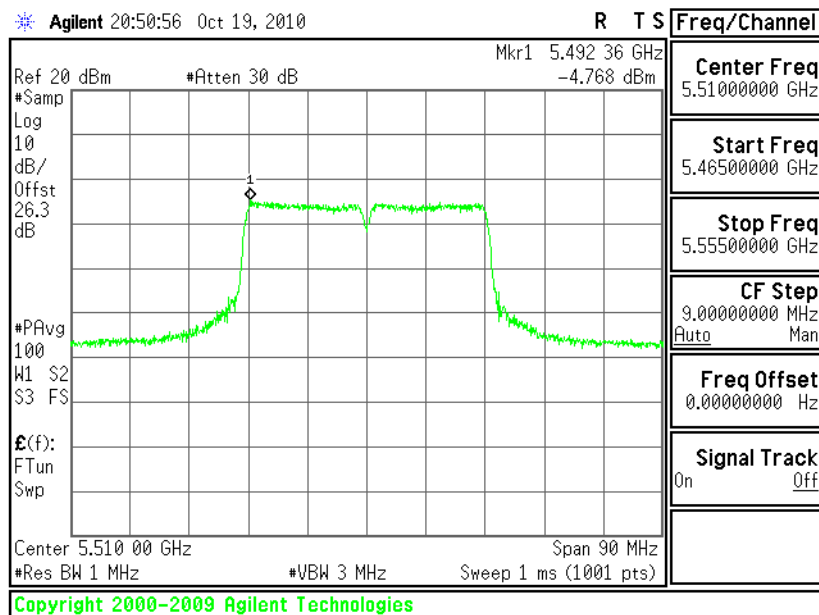


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 2

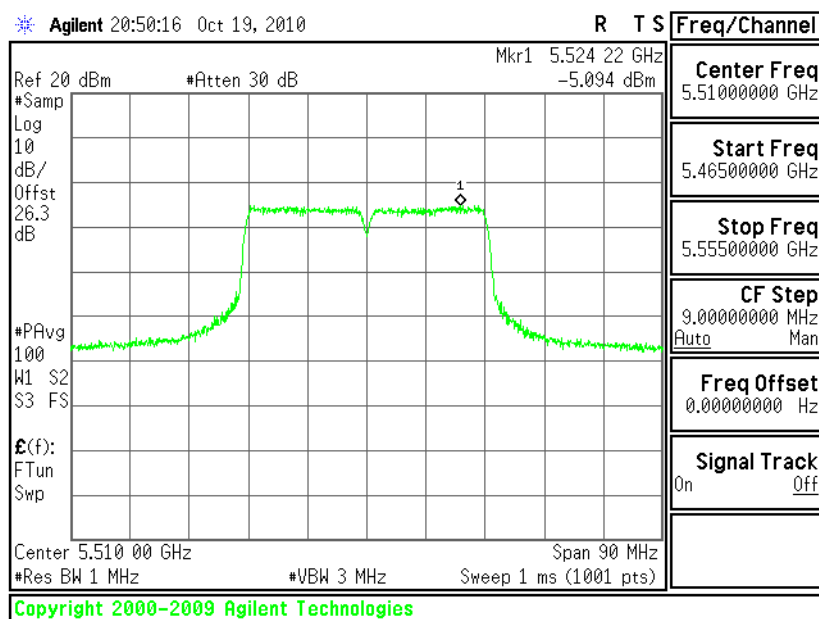




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 0

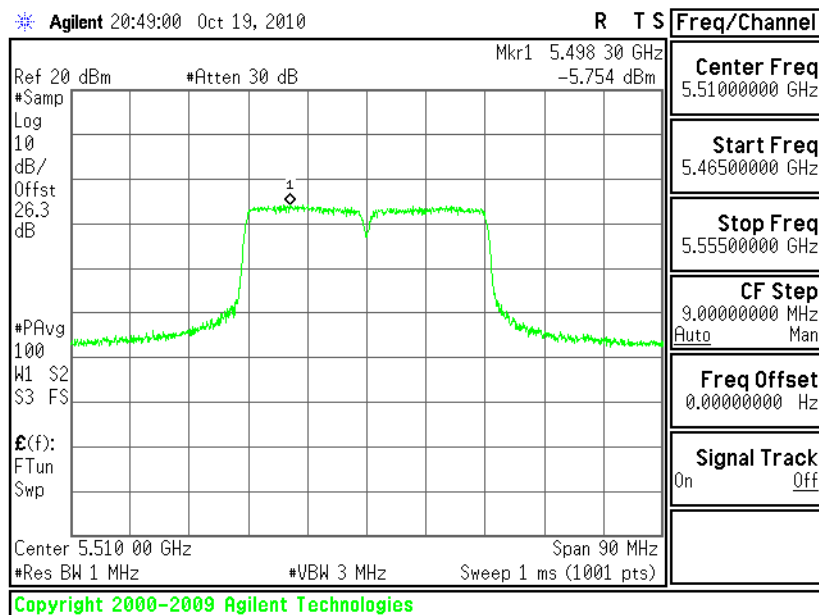


PSD Plot on 802.11n (HT-40) Channel 102 - Chain 1

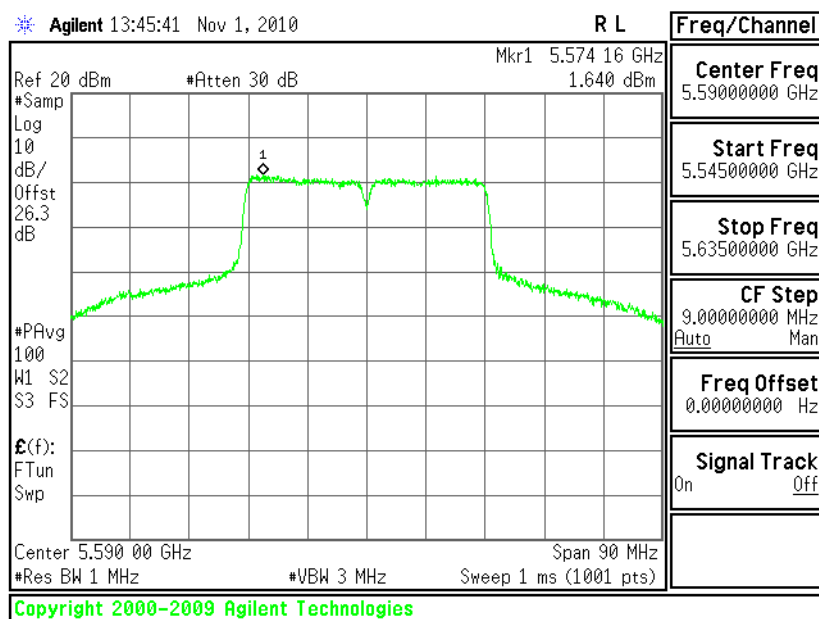




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 2

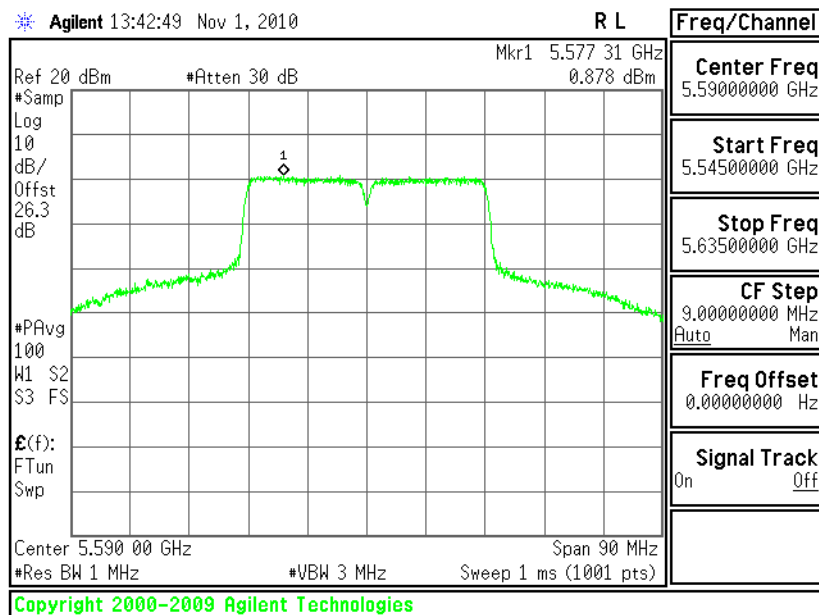


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 0

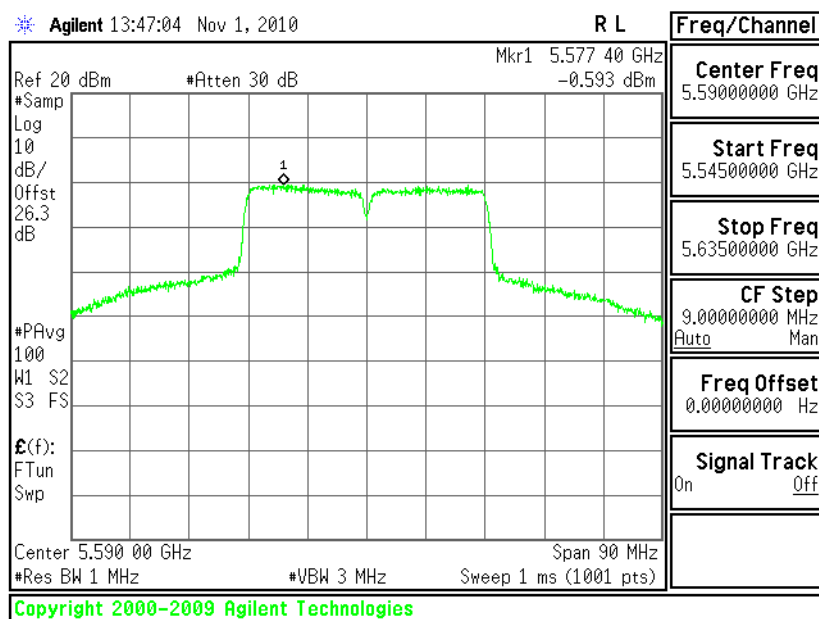




PSD Plot on 802.11n (HT-40) Channel 118 - Chain 1

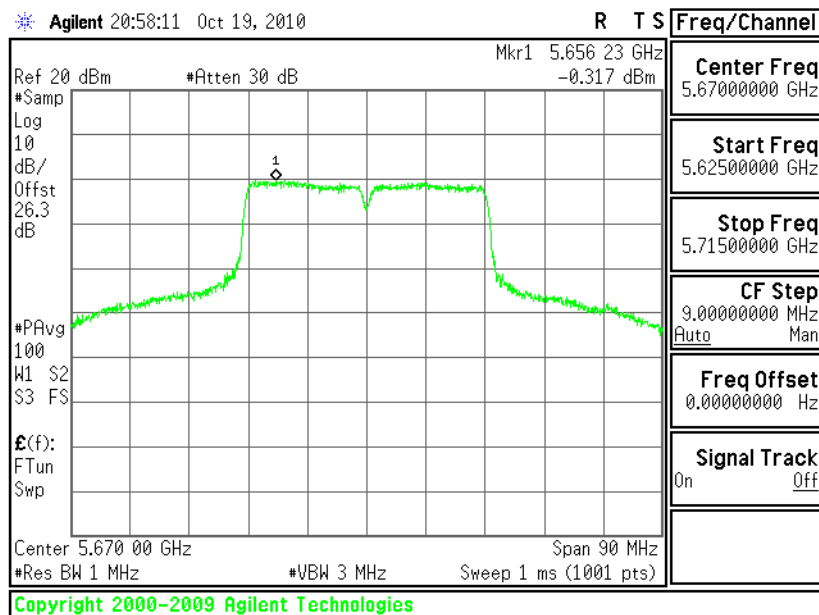


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 2

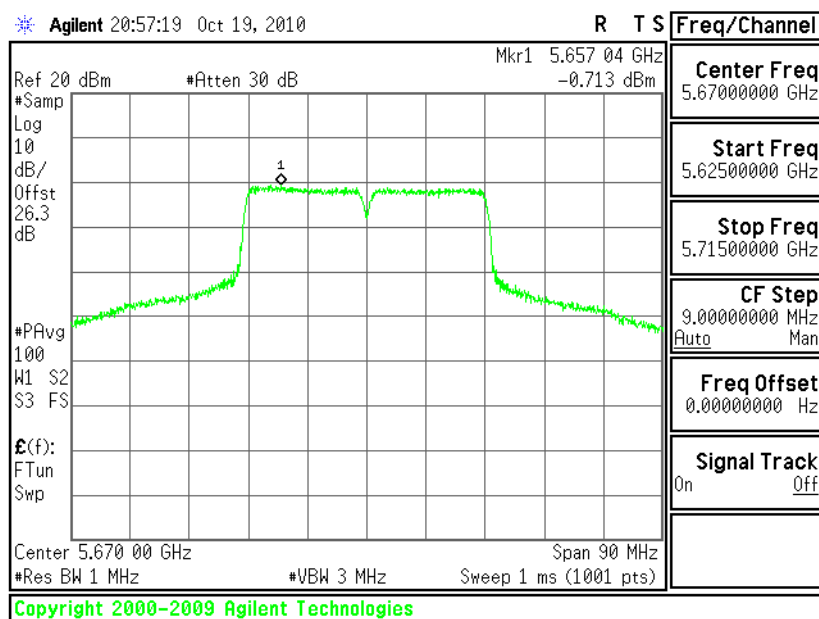




PSD Plot on 802.11n (HT-40) Channel 134 - Chain 0

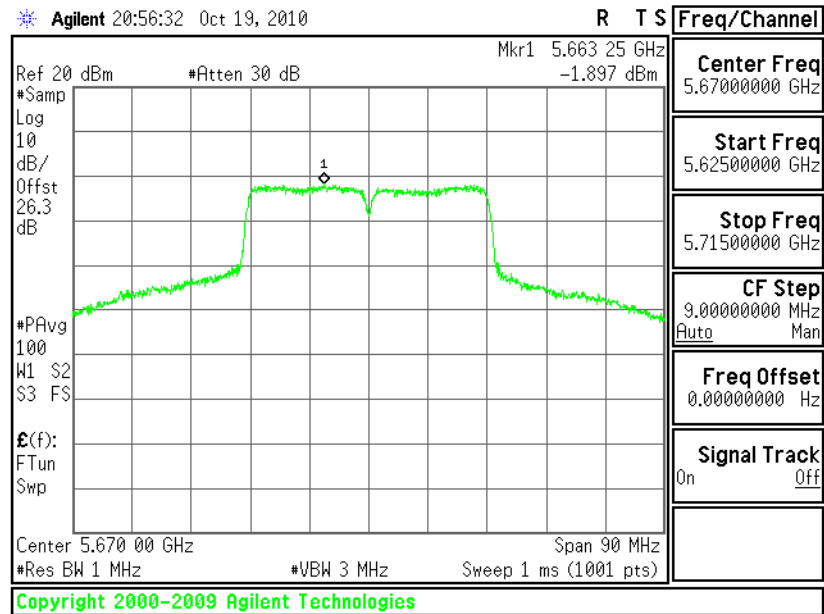


PSD Plot on 802.11n (HT-40) Channel 134 - Chain 1





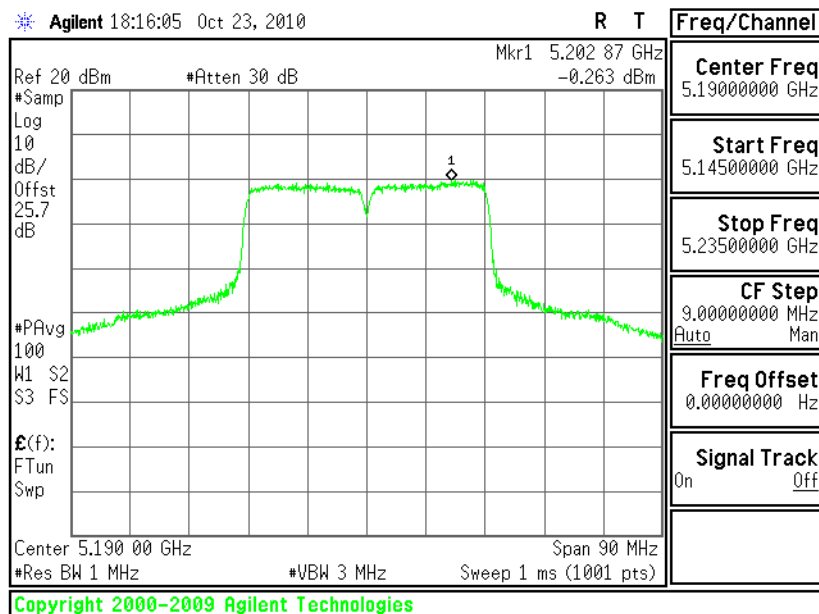
PSD Plot on 802.11n (HT-40) Channel 134 - Chain 2



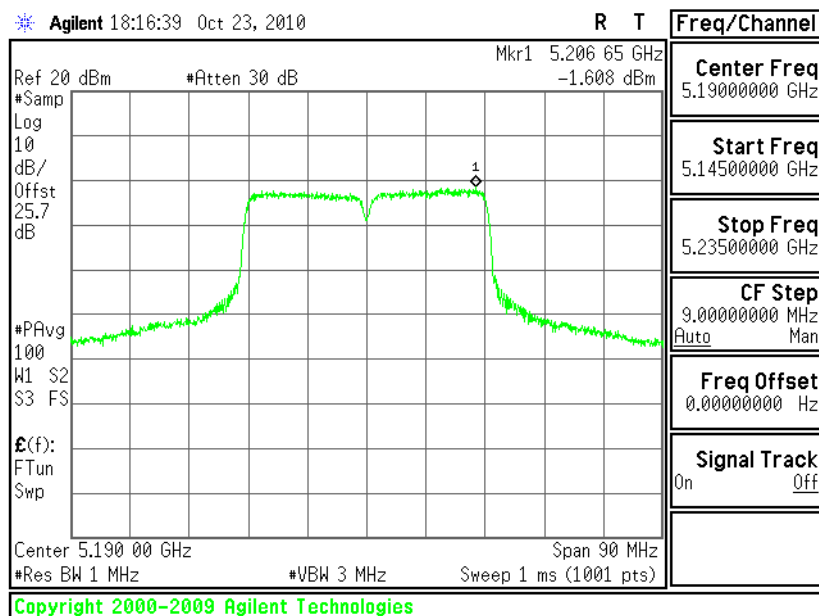


<Beam-Forming Off: 2x3>

PSD Plot on 802.11n (HT-40) Channel 38 - Chain 0

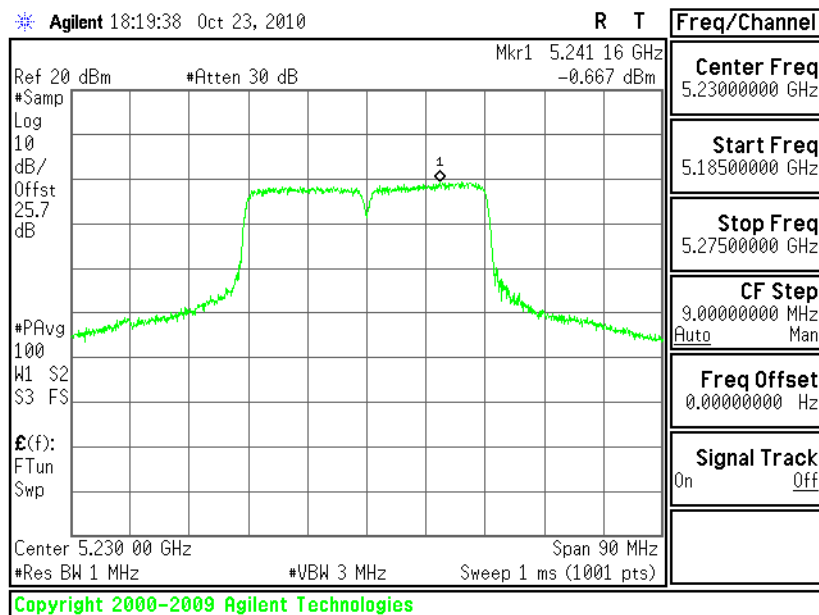


PSD Plot on 802.11n (HT-40) Channel 38 - Chain 1

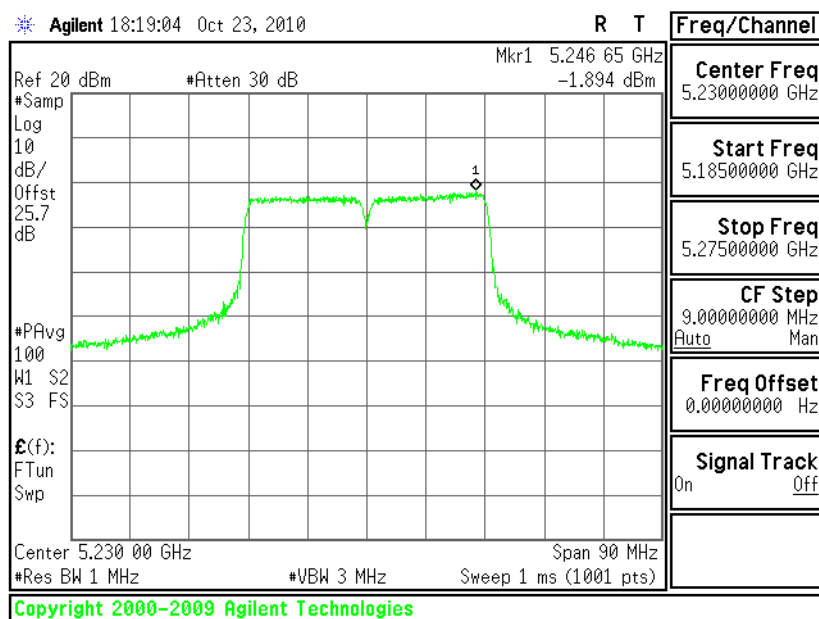




PSD Plot on 802.11n (HT-40) Channel 46 - Chain 0

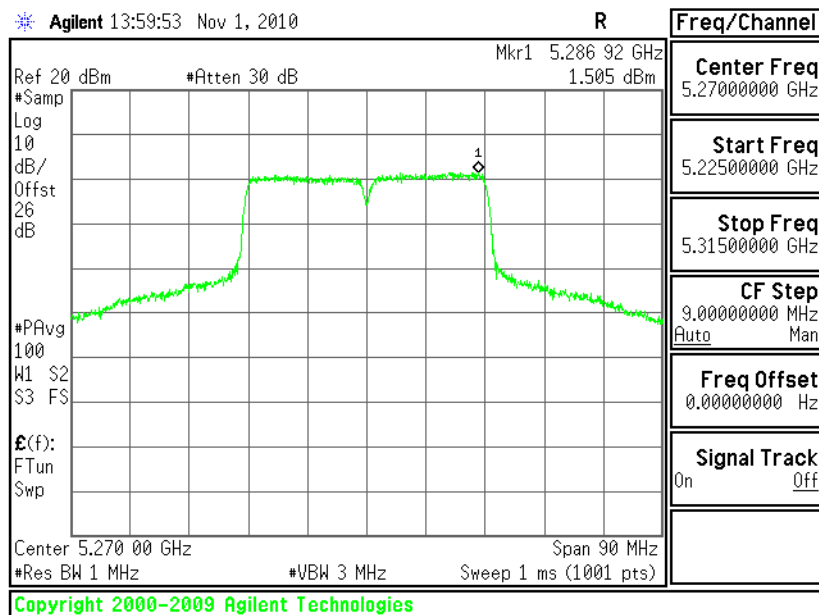


PSD Plot on 802.11n (HT-40) Channel 46 - Chain 1

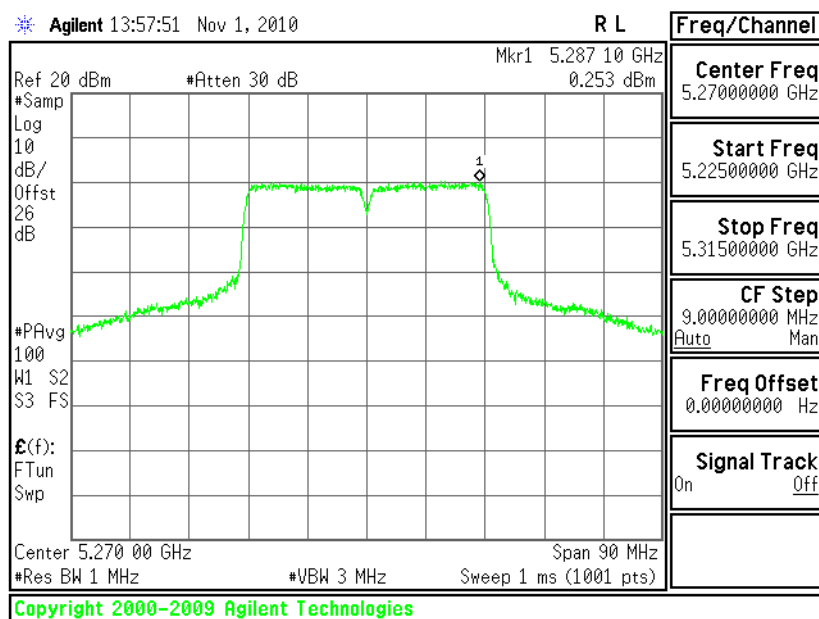




PSD Plot on 802.11n (HT-40) Channel 54 - Chain 0

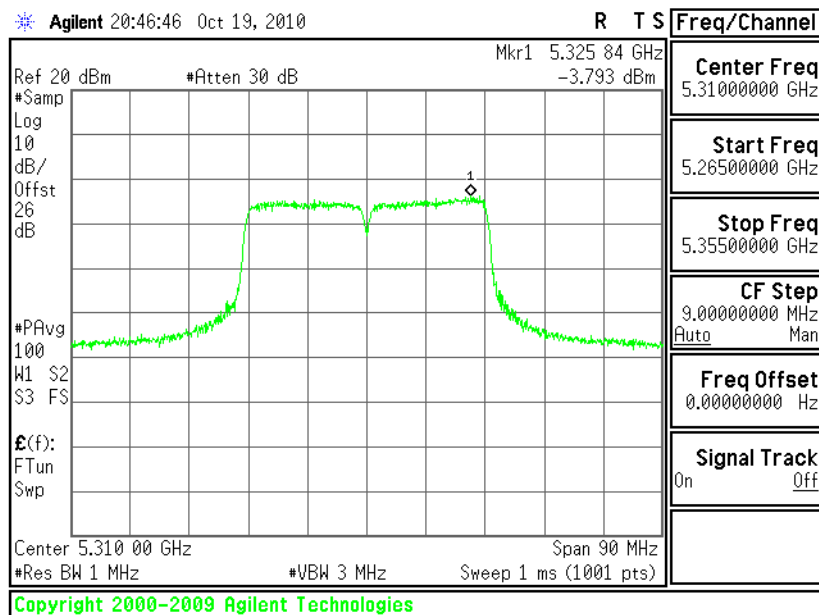


PSD Plot on 802.11n (HT-40) Channel 54 - Chain 1

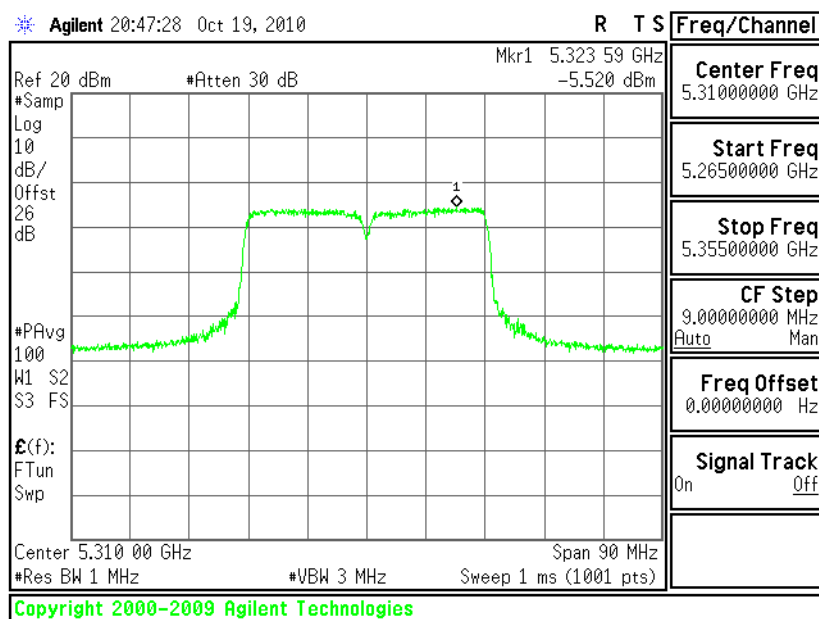




PSD Plot on 802.11n (HT-40) Channel 62 - Chain 0

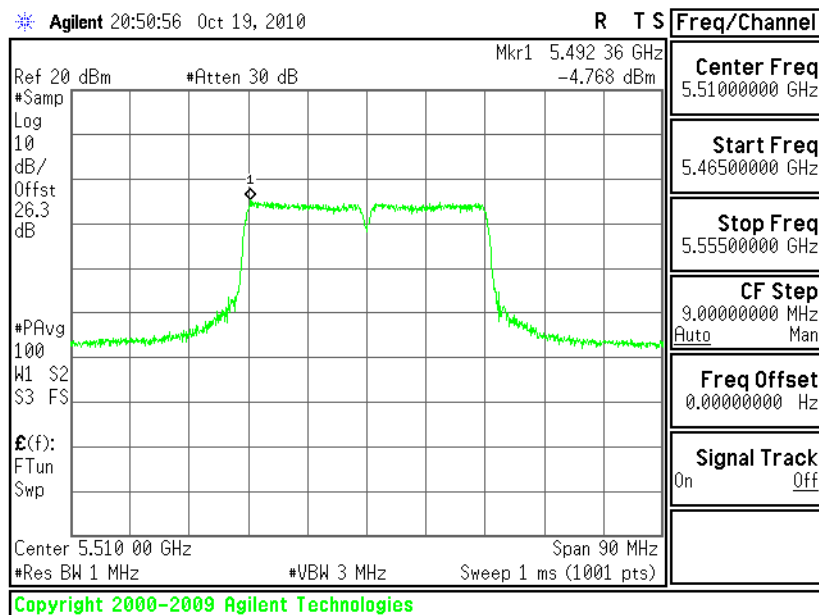


PSD Plot on 802.11n (HT-40) Channel 62 - Chain 1

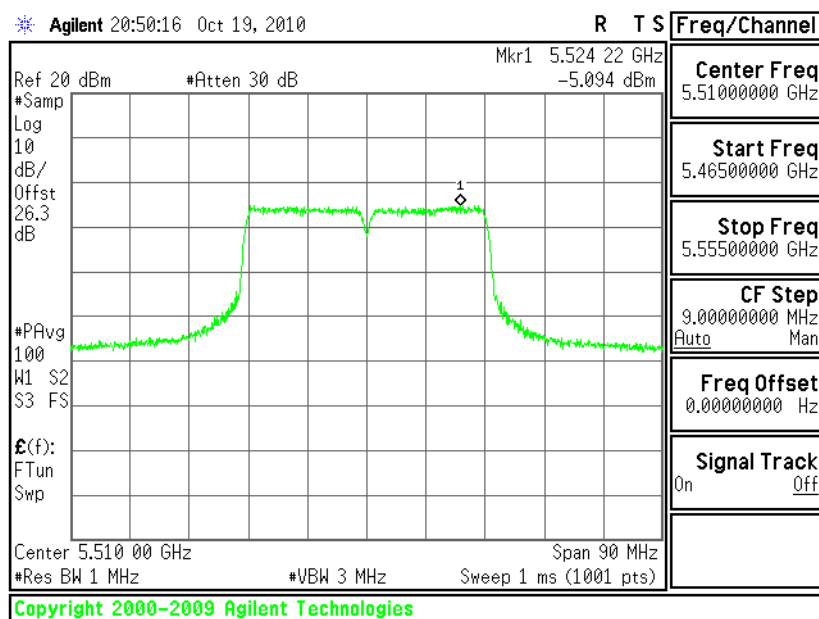




PSD Plot on 802.11n (HT-40) Channel 102 - Chain 0

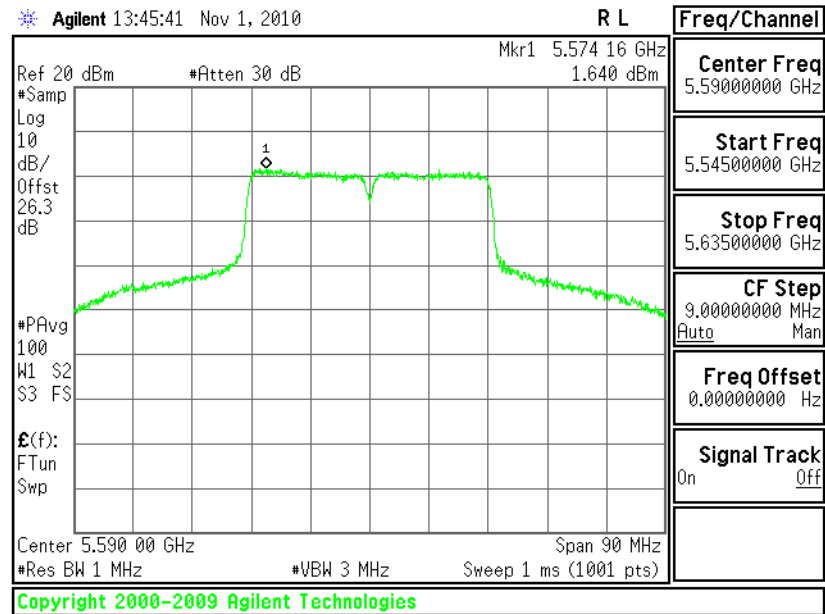


PSD Plot on 802.11n (HT-40) Channel 102 - Chain 1

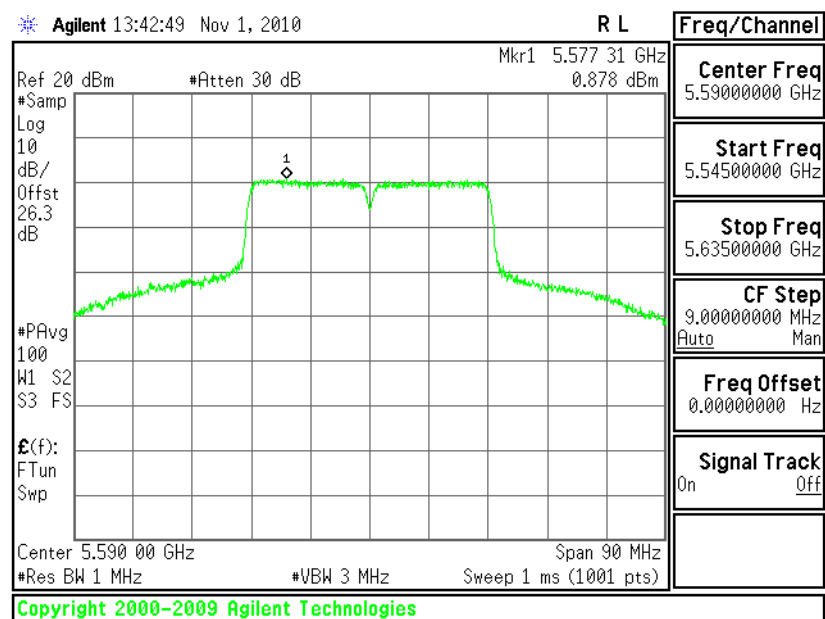




PSD Plot on 802.11n (HT-40) Channel 118 - Chain 0

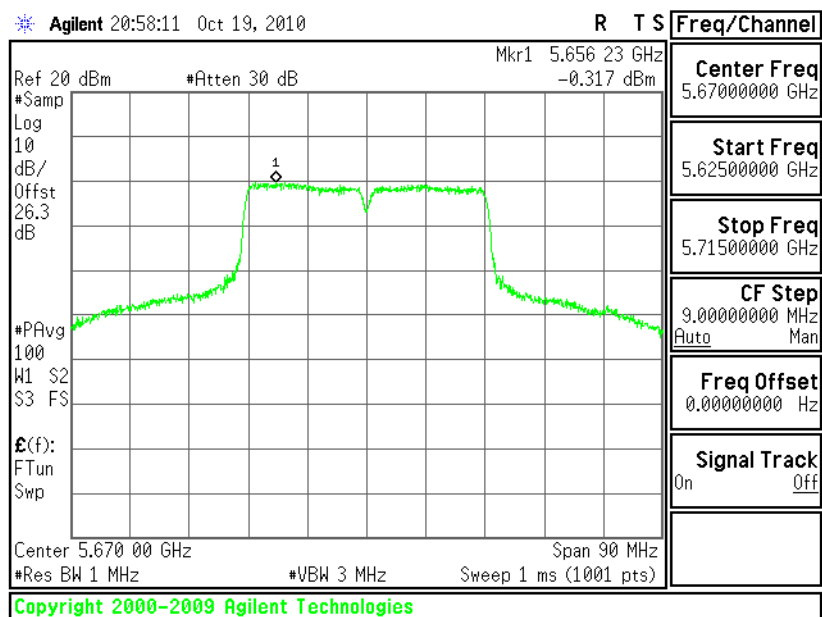


PSD Plot on 802.11n (HT-40) Channel 118 - Chain 1

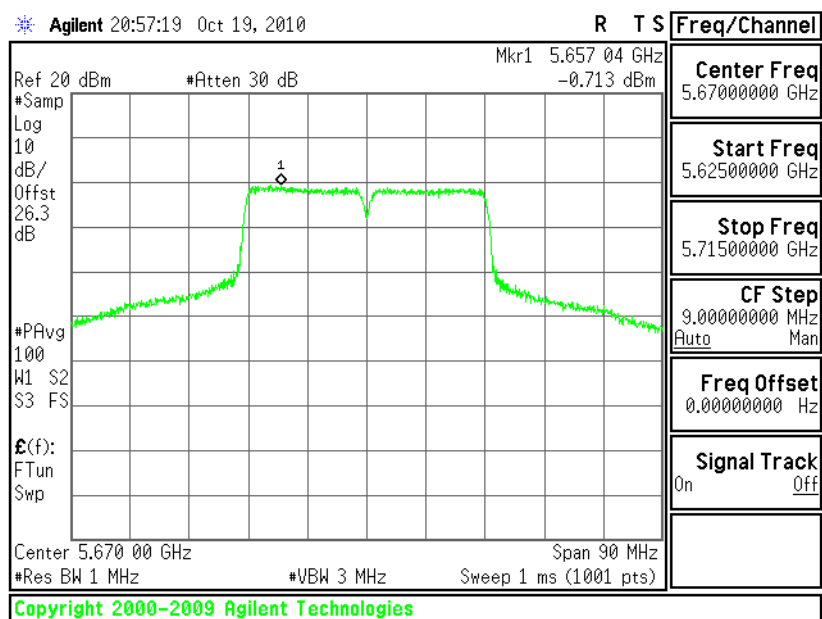




PSD Plot on 802.11n (HT-40) Channel 134 - Chain 0



PSD Plot on 802.11n (HT-40) Channel 134 - Chain 1



3.3 Average Power Measurement

3.3.1 Limit of Average Power

None; for reporting purposes only.

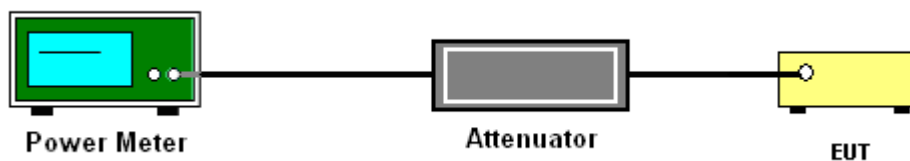
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The RF output of EUT was connected to the power meter by a low loss cable.
2. Measure the power by power meter.

3.3.4 Test Setup



3.3.5 Test Result of Average Power

<Normal Mode: 3x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
36	5180	9.13	8.75	7.47	13.28
44	5220	9.48	8.17	7.36	13.20
48	5240	9.55	7.85	7.68	13.22
52	5260	15.24	15.01	14.71	19.76
60	5300	15.96	14.63	14.82	19.95
64	5320	16.14	14.88	14.78	20.08
100	5500	15.72	14.97	14.68	19.92
120	5600	16.72	16.37	14.72	20.79
140	5700	16.17	15.92	14.73	20.42

<Normal Mode: 2x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
36	5180	10.78	9.75	13.31
44	5220	11.34	10.11	13.78
48	5240	11.89	10.73	14.36
52	5260	18.35	17.33	20.88
60	5300	15.97	14.23	18.20
64	5320	14.81	13.65	17.28
100	5500	15.84	15.72	18.79
120	5600	15.75	14.79	18.31
140	5700	15.63	14.72	18.21

**<Beam-Forming On: 3x3>**

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
36	5180	9.55	8.88	7.28	13.44
44	5220	9.44	8.18	7.41	13.20
48	5240	9.93	8.56	8.15	13.72
52	5260	15.34	14.74	14.57	19.67
60	5300	15.98	14.55	14.84	19.94
64	5320	15.36	14.29	14.48	19.51
100	5500	15.73	15.02	14.62	19.92
120	5600	16.82	16.42	14.93	20.90
140	5700	16.25	15.92	14.82	20.48

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
38	5190	10.71	10.12	8.56	14.66
46	5230	12.38	11.07	10.88	16.27
54	5270	15.77	14.72	14.72	19.87
62	5310	9.02	8.48	9.12	13.65
102	5510	9.55	9.49	8.85	14.08
118	5590	16.11	15.78	14.12	20.19
134	5670	15.61	15.38	14.56	19.98

<Beam-Forming On: 2x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
36	5180	11.87	10.92	14.43
44	5220	11.56	10.38	14.02
48	5240	11.26	10.33	13.83
52	5260	16.78	15.23	19.08
60	5300	16.27	14.87	18.64
64	5320	13.69	12.94	16.34
100	5500	16.16	15.78	18.98
120	5600	15.77	14.68	18.27
140	5700	15.87	15.46	18.68

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
38	5190	11.47	10.32	13.94
46	5230	14.38	12.95	16.73
54	5270	18.37	16.77	20.65
62	5310	9.97	8.85	12.46
102	5510	13.39	13.38	16.40
118	5590	14.64	14.27	17.47
134	5670	15.12	14.78	17.96

<Beam-Forming Off: 3x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
36	5180	10.87	9.91	8.56	14.65
44	5220	10.35	8.72	8.07	13.93
48	5240	10.28	8.65	8.48	13.99
52	5260	15.34	14.74	14.57	19.67
60	5300	15.98	14.55	14.84	19.94
64	5320	15.36	14.29	14.48	19.51
100	5500	15.73	15.02	14.62	19.92
120	5600	16.82	16.42	14.93	20.90
140	5700	16.25	15.92	14.82	20.48

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)			
		Chain 0	Chain 1	Chain 2	Total Power
38	5190	13.02	11.67	10.68	16.67
46	5230	12.69	11.42	10.72	16.46
54	5270	15.77	14.72	14.72	19.87
62	5310	9.02	8.48	9.12	13.65
102	5510	9.55	9.49	8.85	14.08
118	5590	16.11	15.78	14.12	20.19
134	5670	15.61	15.38	14.56	19.98

<Beam-Forming Off: 2x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
36	5180	10.87	9.91	13.43
44	5220	10.35	8.72	12.62
48	5240	10.28	8.65	12.55
52	5260	15.34	14.74	18.06
60	5300	15.98	14.55	18.33
64	5320	15.36	14.29	17.87
100	5500	15.73	15.02	18.40
120	5600	16.82	16.42	19.63
140	5700	16.25	15.92	19.10

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)		
		Chain 0	Chain 1	Total Power
38	5190	13.02	11.67	15.41
46	5230	12.69	11.42	15.11
54	5270	15.77	14.72	18.29
62	5310	9.02	8.48	11.77
102	5510	9.55	9.49	12.53
118	5590	16.11	15.78	18.96
134	5670	15.61	15.38	18.51

3.4 Output Power Measurement

3.4.1 Limit of Maximum Output Power

For the band 5.15~5.25 GHz, the maximum output power shall not exceed the lesser of 50 mW (17dBm) or $4 \text{ dBm} + 10\log B$, where B is the 26 dB emissions bandwidth in MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power and power density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or $11 \text{ dBm} + 10\log B$. If transmitting antenna directional gain is greater than 6 dBi, the peak output power and power density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

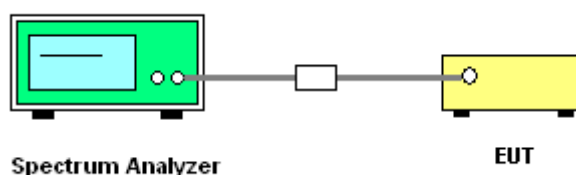
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The testing follows FCC Public Notice DA 02-2138 (Measurement Guidelines of UNII).
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Measure the power and record it.

3.4.4 Test Setup



3.4.5 Test Result of Output Power

<Normal Mode: 3x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
36	5180	9.59	8.31	7.10	13.22	15.15	Pass
44	5220	9.11	8.10	7.05	12.94	15.15	Pass
48	5240	9.60	7.50	7.38	13.06	15.15	Pass
52	5260	15.97	14.77	14.33	19.85	22.15	Pass
60	5300	16.31	14.78	14.43	20.02	22.15	Pass
64	5320	15.29	14.74	14.32	19.57	22.15	Pass
100	5500	15.79	15.05	14.54	19.93	20.47	Pass
120	5600	16.25	15.77	14.15	20.25	20.47	Pass
140	5700	16.28	15.23	14.83	20.26	20.47	Pass

Note: The maximum composite antenna gain is 7.85 for 5150 MHz ~ 5350 MHz and 9.53 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 15.15 dBm for 5150 MHz ~ 5250 MHz, 22.15 dBm for 5250 MHz ~ 5350 MHz and 20.47 dBm for 5470 MHz ~ 5725 MHz.

<Normal Mode: 2x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27℃
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11a Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
36	5180	11.00	10.76	13.89	16.91	Pass
44	5220	11.46	10.85	14.18	16.91	Pass
48	5240	12.30	10.94	14.68	16.91	Pass
52	5260	19.19	17.36	21.38	23.91	Pass
60	5300	16.76	15.05	19.00	23.91	Pass
64	5320	15.29	14.73	18.03	23.91	Pass
100	5500	16.44	16.57	19.52	22.23	Pass
120	5600	16.38	16.16	19.28	22.23	Pass
140	5700	15.91	14.97	18.48	22.23	Pass

Note: The maximum composite antenna gain is 6.09 for 5150 MHz ~ 5350 MHz and 7.77 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 16.91 dBm for 5150 MHz ~ 5250 MHz, 23.91 dBm for 5250 MHz ~ 5350 MHz and 22.23 dBm for 5470 MHz ~ 5725 MHz.

<Beam-Forming On: 3x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
36	5180	9.13	8.13	7.04	12.95	15.15	Pass
44	5220	9.54	7.91	7.22	13.11	15.15	Pass
48	5240	9.76	8.43	7.82	13.52	15.15	Pass
52	5260	15.19	14.44	14.12	19.38	22.15	Pass
60	5300	15.97	14.28	14.78	19.84	22.15	Pass
64	5320	15.56	14.26	14.42	19.56	22.15	Pass
100	5500	15.41	15.21	14.61	19.86	20.47	Pass
120	5600	15.90	16.44	14.53	20.47	20.47	Pass
140	5700	16.76	15.60	14.09	20.39	20.47	Pass

Note: The maximum composite antenna gain is 7.85 for 5150 MHz ~ 5350 MHz and 9.53 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 15.15 dBm for 5150 MHz ~ 5250 MHz, 22.15 dBm for 5250 MHz ~ 5350 MHz and 20.47 dBm for 5470 MHz ~ 5725 MHz.

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
38	5190	10.64	9.84	8.9	14.62	15.15	Pass
46	5230	11.25	10.09	9.14	15.02	15.15	Pass
54	5270	15.46	14.50	14.53	19.62	22.15	Pass
62	5310	9.45	8.81	9.04	13.88	22.15	Pass
102	5510	9.45	9.74	8.56	14.05	20.47	Pass
118	5590	15.56	15.59	13.88	19.85	20.47	Pass
134	5670	14.56	14.98	14.60	19.49	20.47	Pass

Note: The maximum composite antenna gain is 7.85 for 5150 MHz ~ 5350 MHz and 9.53 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 15.15 dBm for 5150 MHz ~ 5250 MHz, 22.15 dBm for 5250 MHz ~ 5350 MHz and 20.47 dBm for 5470 MHz ~ 5725 MHz.

<Beam-Forming On: 2x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
36	5180	11.68	11.21	14.46	16.91	Pass
44	5220	10.89	10.07	13.51	16.91	Pass
48	5240	10.58	10.67	13.64	16.91	Pass
52	5260	17.17	15.40	19.38	23.91	Pass
60	5300	16.17	15.01	18.64	23.91	Pass
64	5320	14.34	13.80	17.09	23.91	Pass
100	5500	16.69	16.30	19.51	22.23	Pass
120	5600	16.15	15.65	18.92	22.23	Pass
140	5700	16.01	15.72	18.88	22.23	Pass

Note: The maximum composite antenna gain is 6.09 for 5150 MHz ~ 5350 MHz and 7.77 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 16.91 dBm for 5150 MHz ~ 5250 MHz, 23.91 dBm for 5250 MHz ~ 5350 MHz and 22.23 dBm for 5470 MHz ~ 5725 MHz.

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
38	5190	11.27	10.1	13.73	16.91	Pass
46	5230	14.23	13.38	16.84	16.91	Pass
54	5270	19.01	16.93	21.10	23.91	Pass
62	5310	10.17	9.27	12.75	23.91	Pass
102	5510	14.48	14.15	17.33	22.23	Pass
118	5590	15.2	14.79	18.01	22.23	Pass
134	5670	15.44	15.58	18.52	22.23	Pass

Note: The maximum composite antenna gain is 6.09 for 5150 MHz ~ 5350 MHz and 7.77 dBi for 5470 MHz ~ 5725 MHz; therefore the limits are 16.91 dBm for 5150 MHz ~ 5250 MHz, 23.91 dBm for 5250 MHz ~ 5350 MHz and 22.23 dBm for 5470 MHz ~ 5725 MHz.

<Beam-Forming Off: 3x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
36	5180	11.21	10.33	8.75	14.98	17.00	Pass
44	5220	10.22	9.33	8.38	14.15	17.00	Pass
48	5240	10.84	9.24	8.34	14.37	17.00	Pass
52	5260	15.19	14.44	14.12	19.38	24.00	Pass
60	5300	15.97	14.28	14.78	19.84	24.00	Pass
64	5320	15.56	14.26	14.42	19.56	24.00	Pass
100	5500	15.41	15.21	14.61	19.86	24.00	Pass
120	5600	15.90	16.44	14.53	20.47	24.00	Pass
140	5700	16.76	15.60	14.09	20.39	24.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)				Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Chain 2	Summation		
38	5190	13.27	12.01	10.51	16.85	17.00	Pass
46	5230	12.70	11.28	10.87	16.46	17.00	Pass
54	5270	15.46	14.50	14.53	19.62	24.00	Pass
62	5310	9.45	8.81	9.04	13.88	24.00	Pass
102	5510	9.45	9.74	8.56	14.05	24.00	Pass
118	5590	15.56	15.59	13.88	19.85	24.00	Pass
134	5670	14.56	14.98	14.60	19.49	24.00	Pass

<Beam-Forming Off: 2x3>

Test Mode :	802.11n (HT-20) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Channel	Frequency (MHz)	802.11n (HT-20) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
36	5180	11.21	10.33	13.80	17.00	Pass
44	5220	10.22	9.33	12.81	17.00	Pass
48	5240	10.84	9.24	13.12	17.00	Pass
52	5260	15.19	14.44	17.84	24.00	Pass
60	5300	15.97	14.28	18.22	24.00	Pass
64	5320	15.56	14.26	17.97	24.00	Pass
100	5500	15.41	15.21	18.32	24.00	Pass
120	5600	15.90	16.44	19.19	24.00	Pass
140	5700	16.76	15.60	19.23	24.00	Pass

Test Mode :	802.11n (HT-40) L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

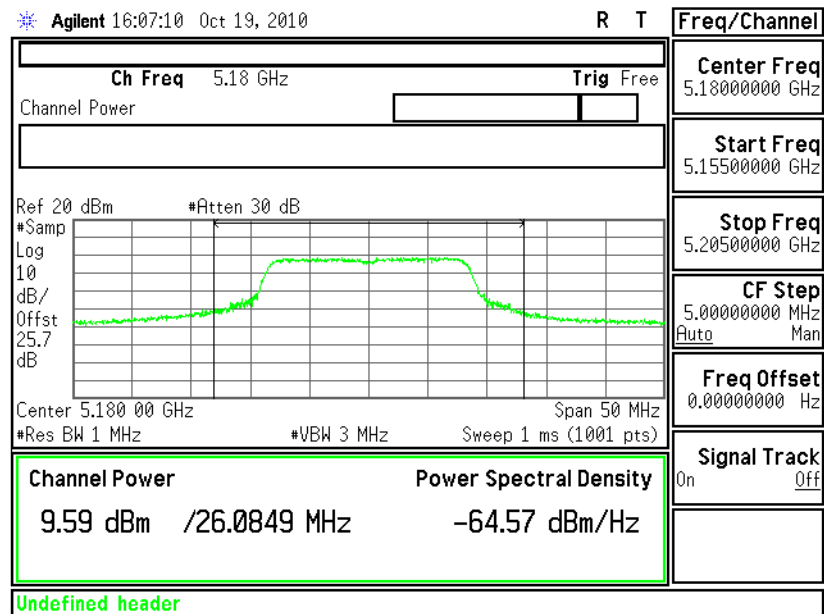
Channel	Frequency (MHz)	802.11n (HT-40) Measured Output Power (dBm)			Max. Limits (dBm)	Pass/Fail
		Chain 0	Chain 1	Summation		
38	5190	13.27	12.01	15.70	17.00	Pass
46	5230	12.70	11.28	15.06	17.00	Pass
54	5270	15.46	14.50	18.02	24.00	Pass
62	5310	9.45	8.81	12.15	24.00	Pass
102	5510	9.45	9.74	12.61	24.00	Pass
118	5590	15.56	15.59	18.59	24.00	Pass
134	5670	14.56	14.98	17.79	24.00	Pass



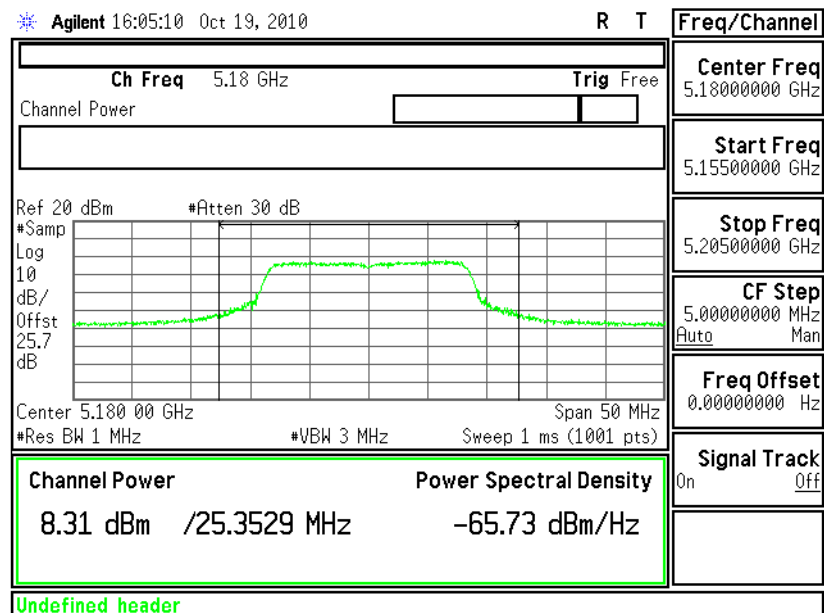
3.4.6 Test Result of Output Power Plots

<Normal Mode: 3x3>

Output Power Plot on 802.11a Channel 36 - Chain 0



Output Power Plot on 802.11a Channel 36 - Chain 1

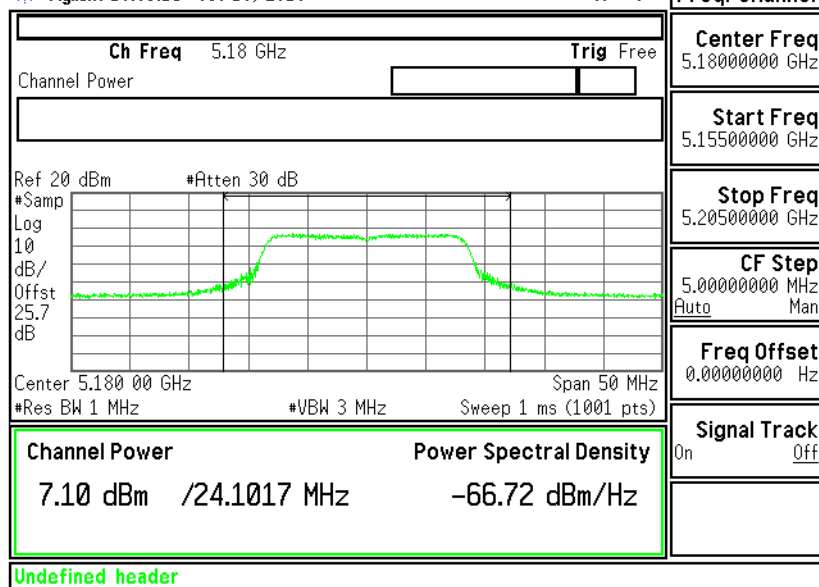




Output Power Plot on 802.11a Channel 36 - Chain 2

Agilent 16:03:15 Oct 19, 2010

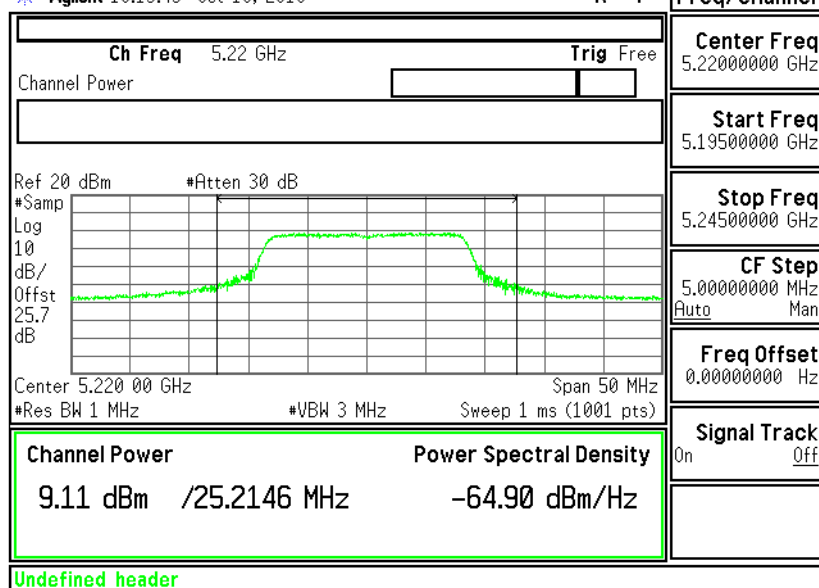
R T



Output Power Plot on 802.11a Channel 44 - Chain 0

Agilent 16:13:43 Oct 19, 2010

R T

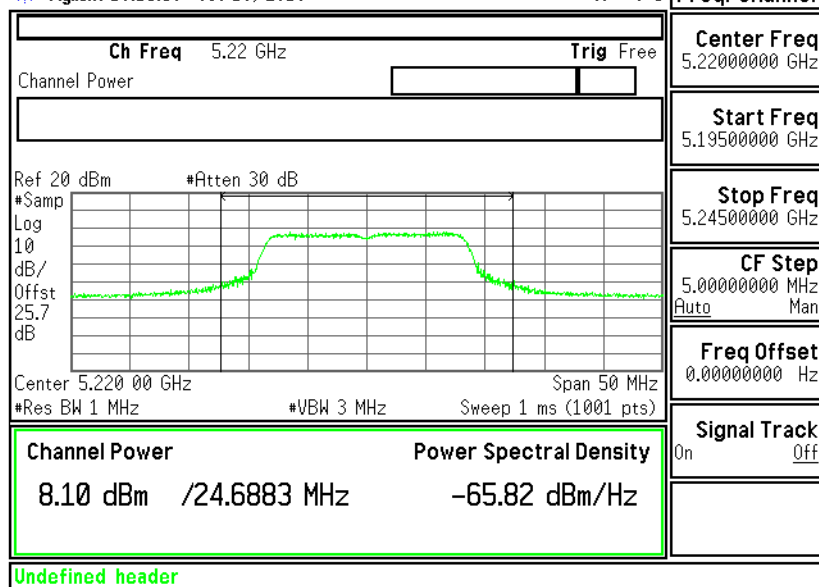




Output Power Plot on 802.11a Channel 44 - Chain 1

Agilent 16:15:59 Oct 19, 2010

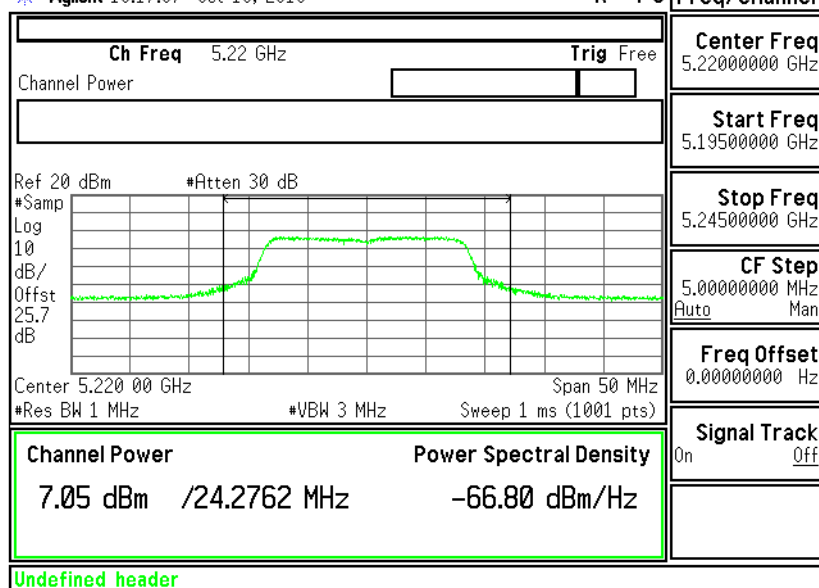
R T S



Output Power Plot on 802.11a Channel 44 - Chain 2

Agilent 16:17:07 Oct 19, 2010

R T S

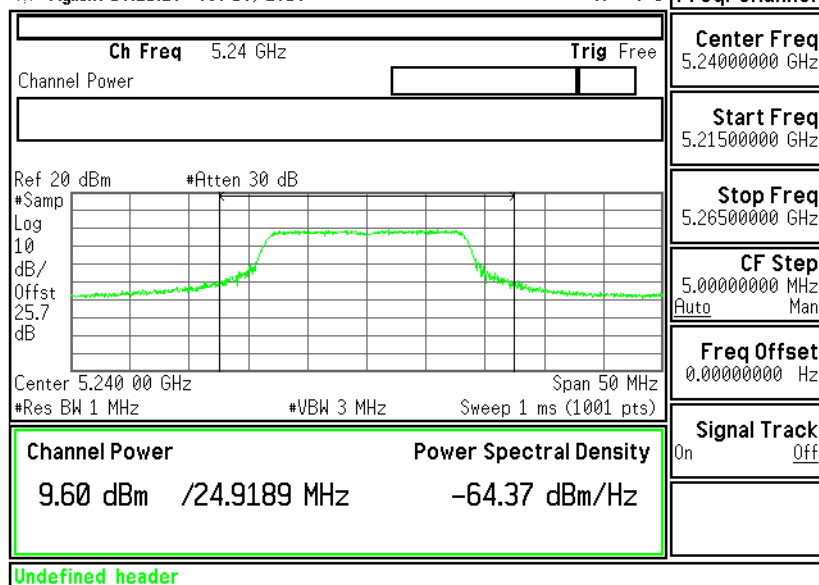




Output Power Plot on 802.11a Channel 48 – Chain 0

Agilent 16:21:28 Oct 19, 2010

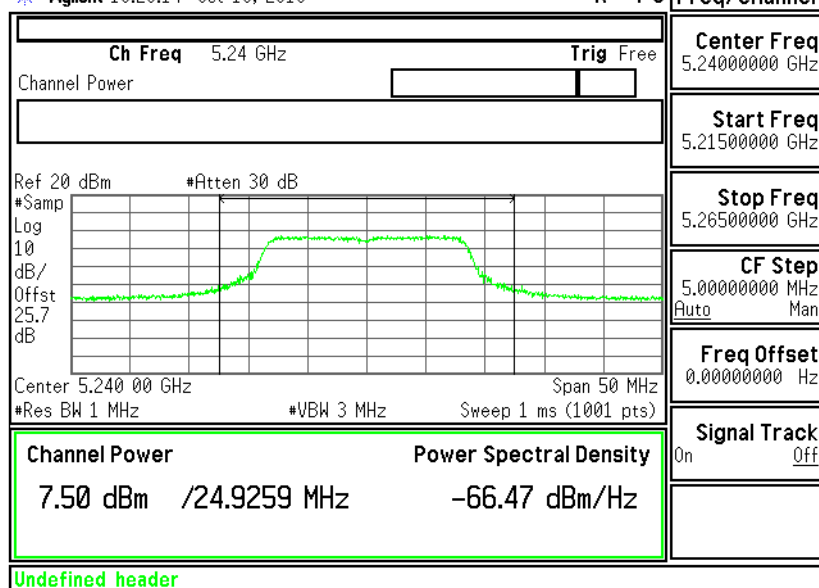
R T S



Output Power Plot on 802.11a Channel 48 - Chain 1

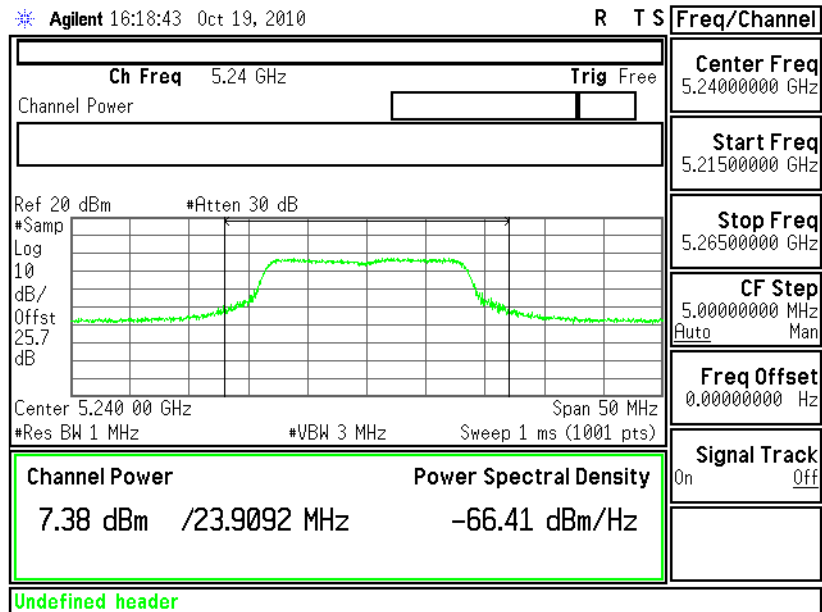
Agilent 16:20:14 Oct 19, 2010

R T S

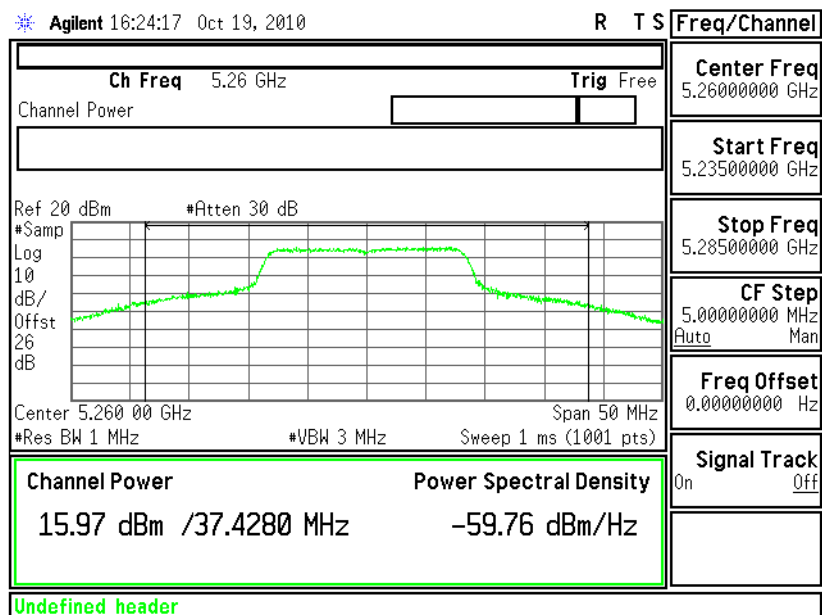




Output Power Plot on 802.11a Channel 48 - Chain 2



Output Power Plot on 802.11a Channel 52 - Chain 0

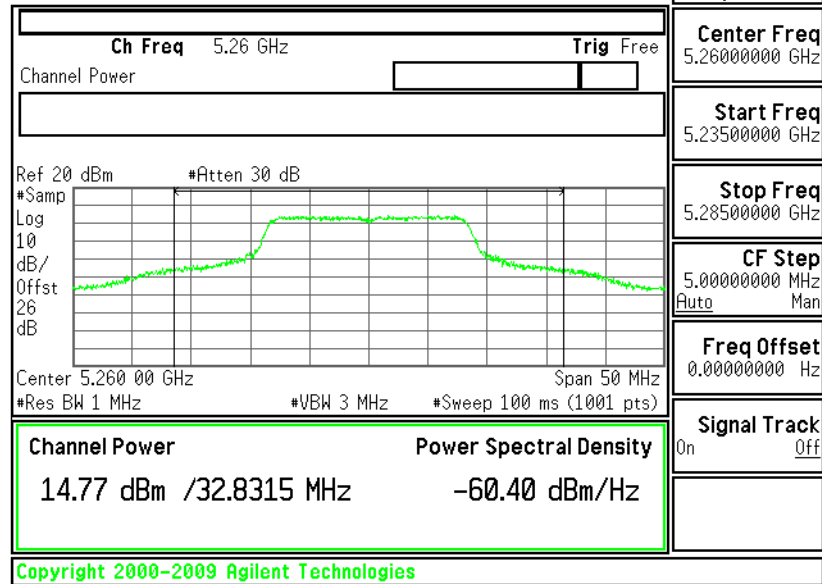




Output Power Plot on 802.11a Channel 52 - Chain 1

Agilent 11:39:28 Nov 1, 2010

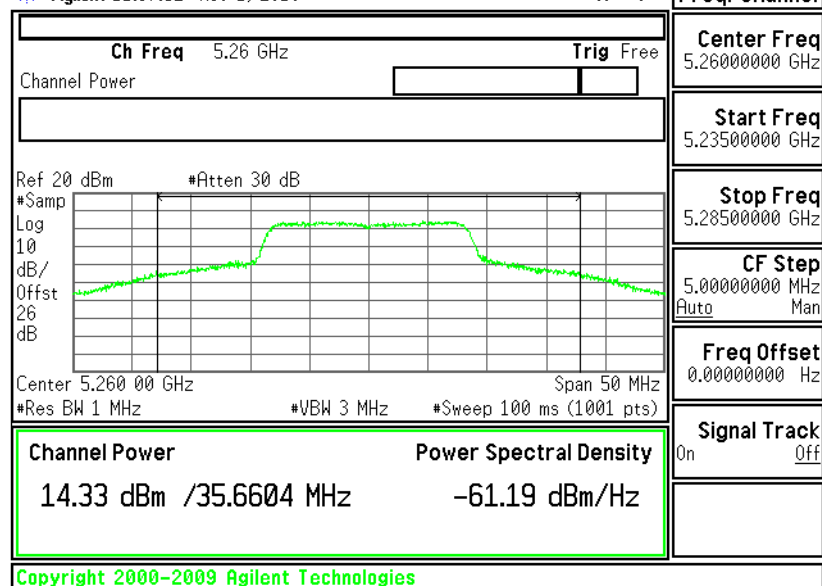
R T



Output Power Plot on 802.11a Channel 52 - Chain 2

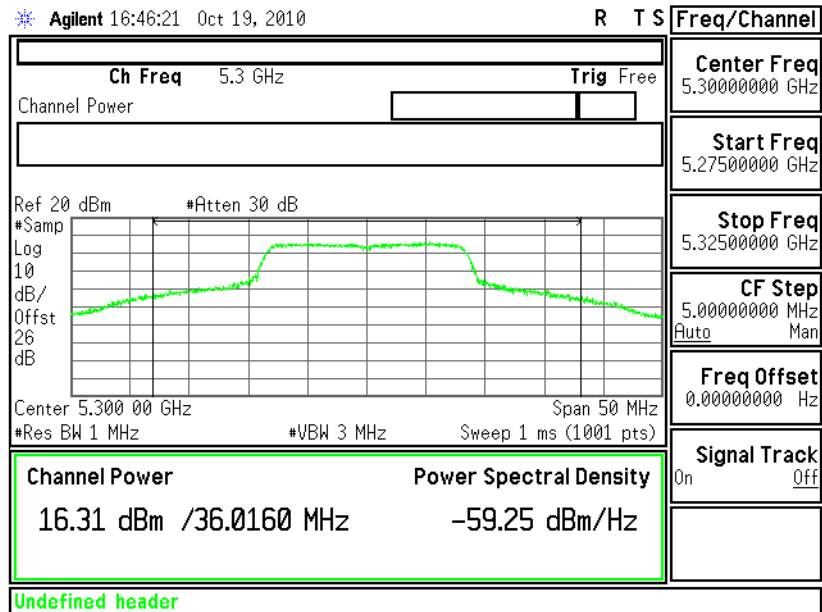
Agilent 11:37:52 Nov 1, 2010

R T

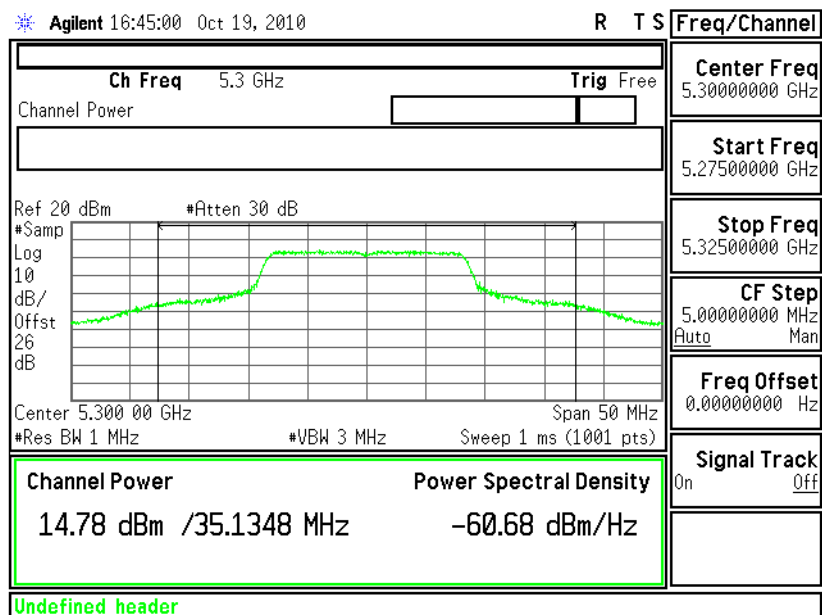




Output Power Plot on 802.11a Channel 60 - Chain 0



Output Power Plot on 802.11a Channel 60 - Chain 1

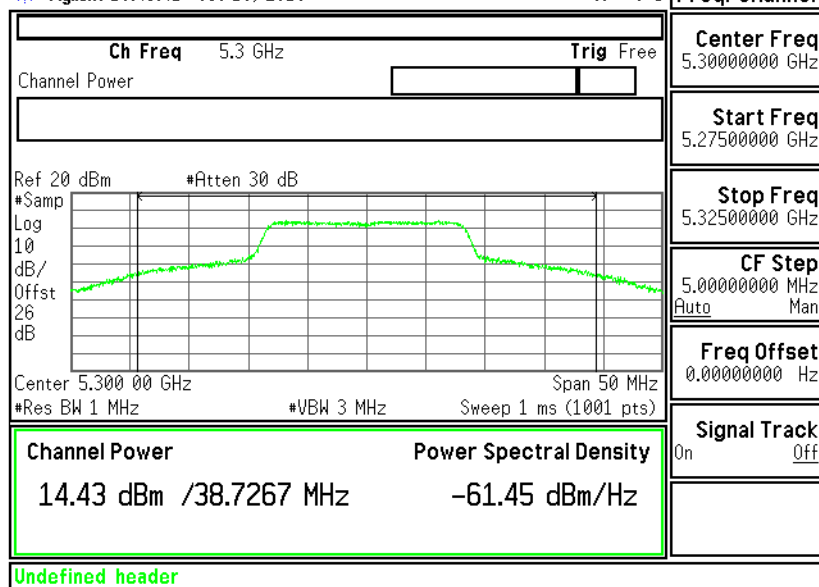




Output Power Plot on 802.11a Channel 60 - Chain 2

Agilent 16:43:41 Oct 19, 2010

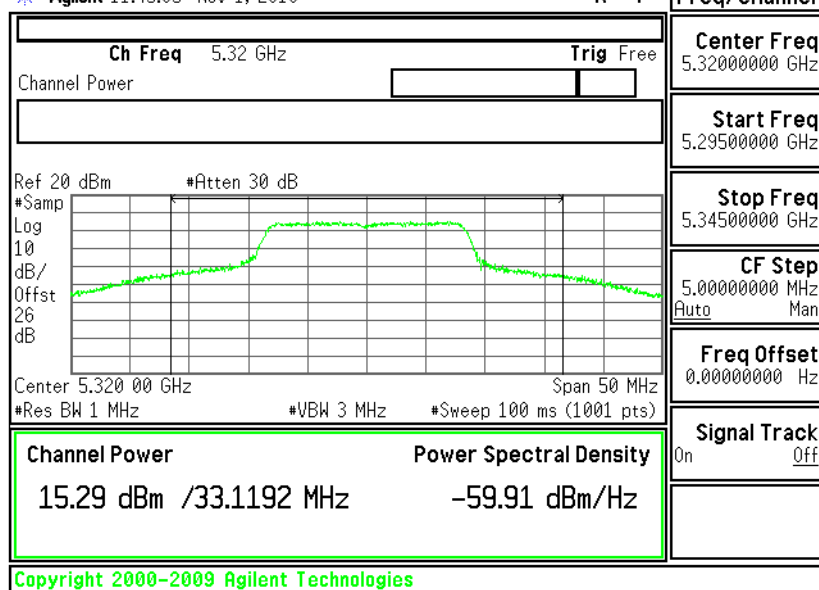
R T S



Output Power Plot on 802.11a Channel 64 - Chain 0

Agilent 11:45:05 Nov 1, 2010

R T

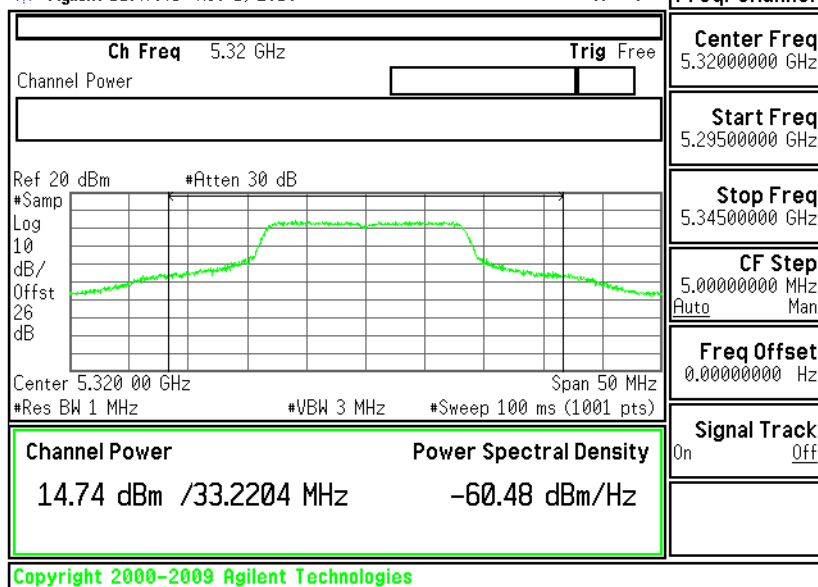




Output Power Plot on 802.11a Channel 64 - Chain 1

Agilent 11:47:45 Nov 1, 2010

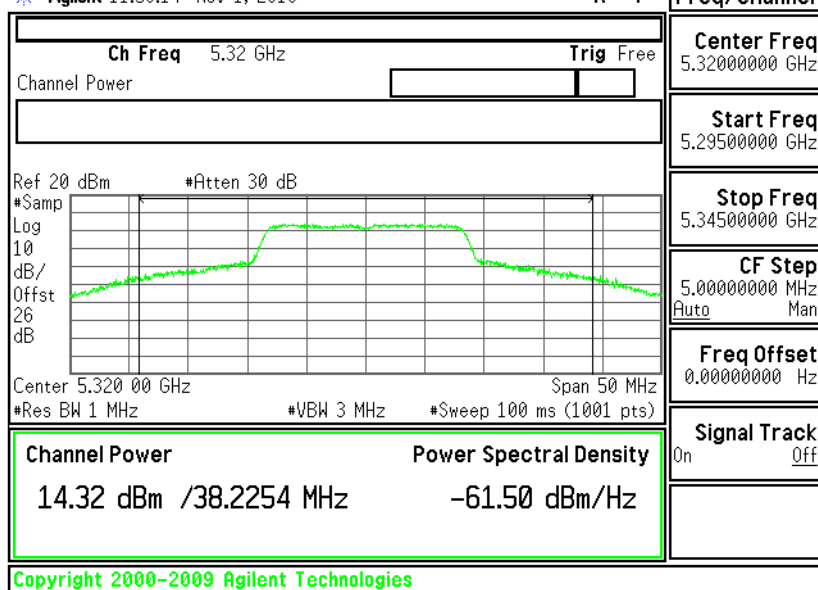
R T



Output Power Plot on 802.11a Channel 64 - Chain 2

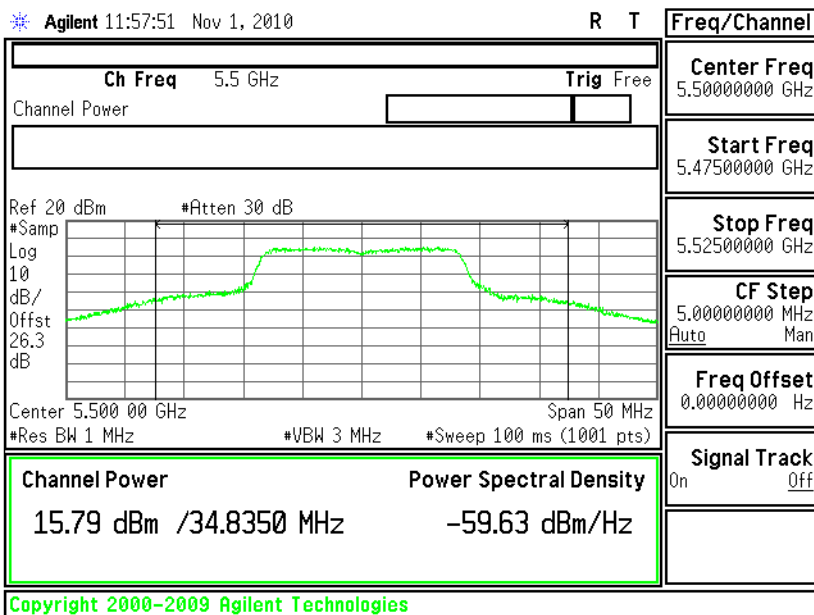
Agilent 11:50:14 Nov 1, 2010

R T

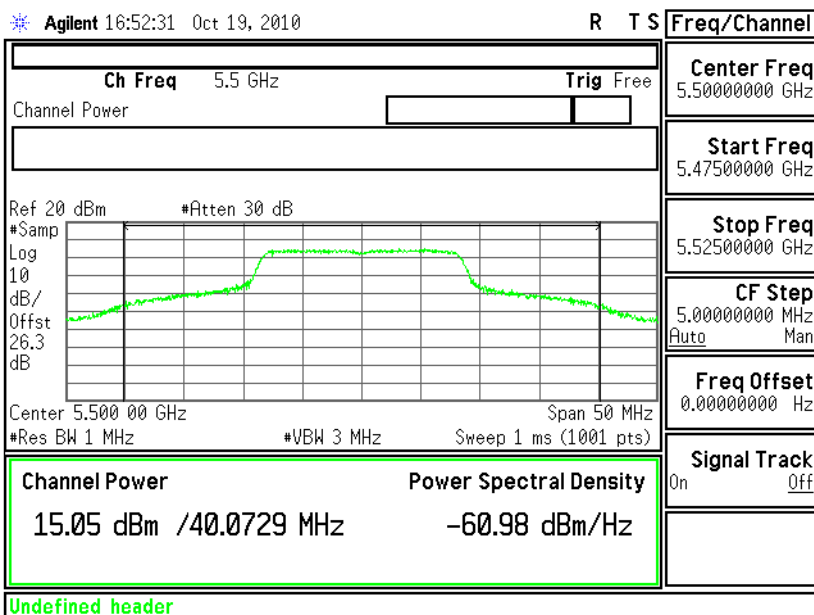




Output Power Plot on 802.11a Channel 100 – Chain 0



Output Power Plot on 802.11a Channel 100 - Chain 1

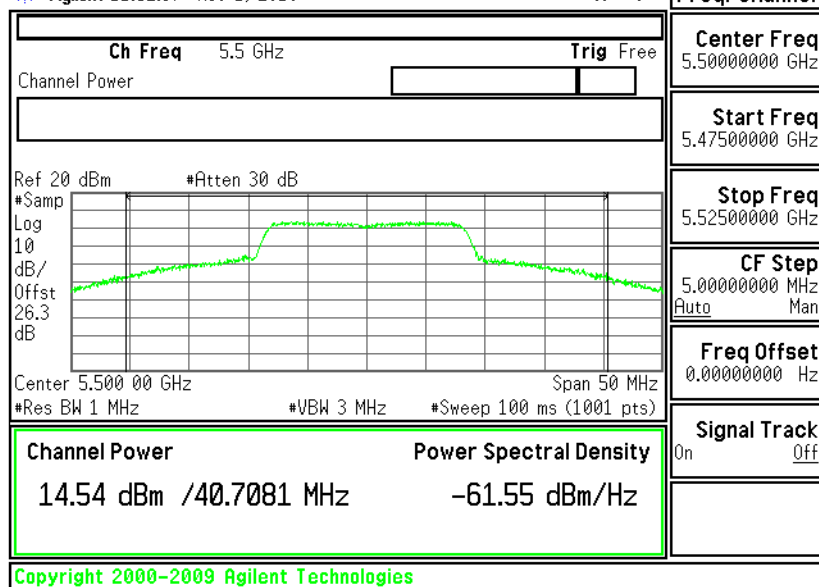




Output Power Plot on 802.11a Channel 100 - Chain 2

Agilent 11:52:37 Nov 1, 2010

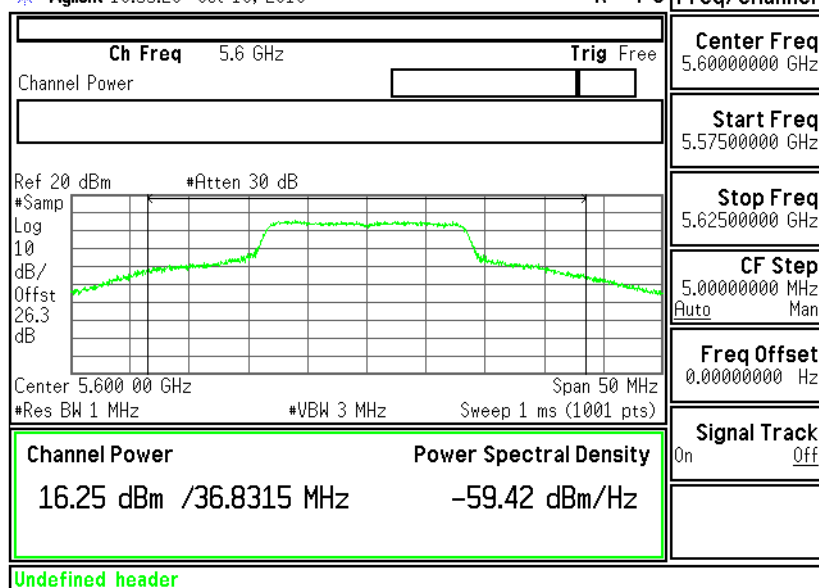
R T



Output Power Plot on 802.11a Channel 120 - Chain 0

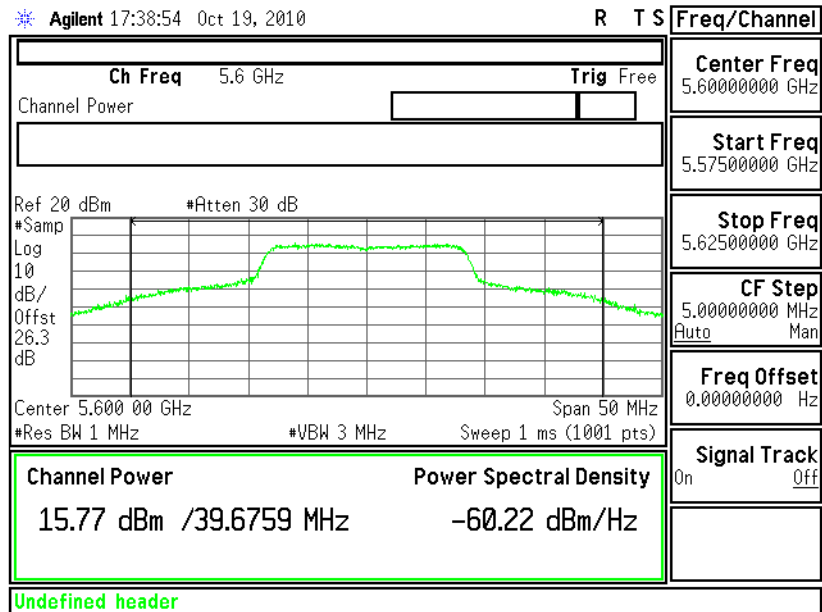
Agilent 16:55:20 Oct 19, 2010

R T S

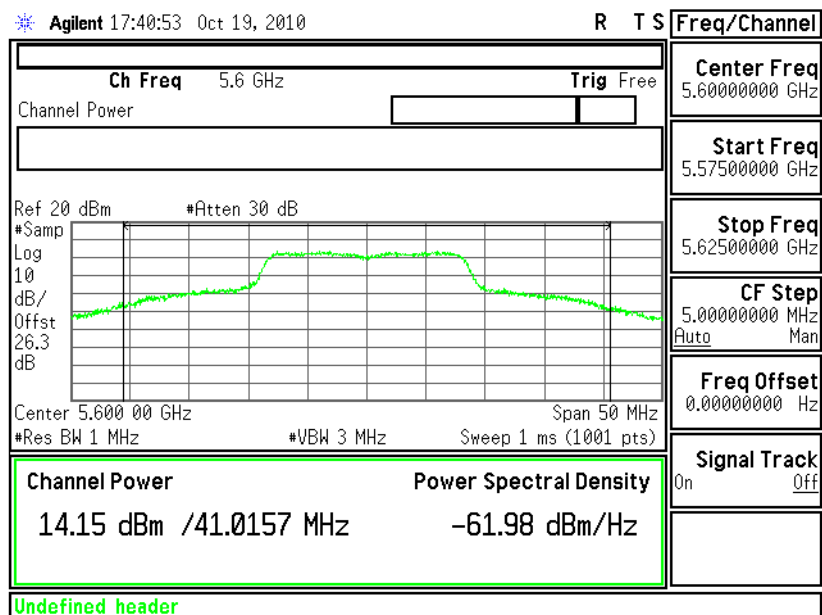




Output Power Plot on 802.11a Channel 120 - Chain 1

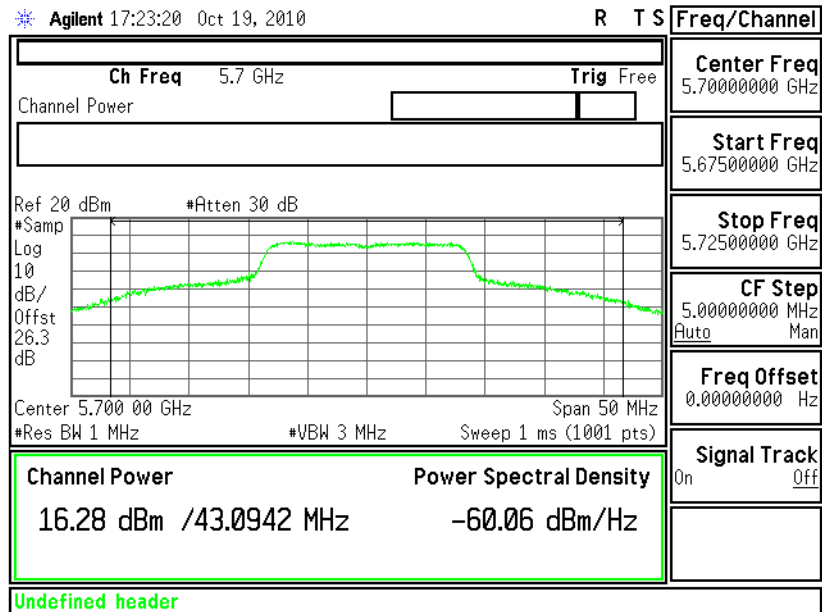


Output Power Plot on 802.11a Channel 120 - Chain 2

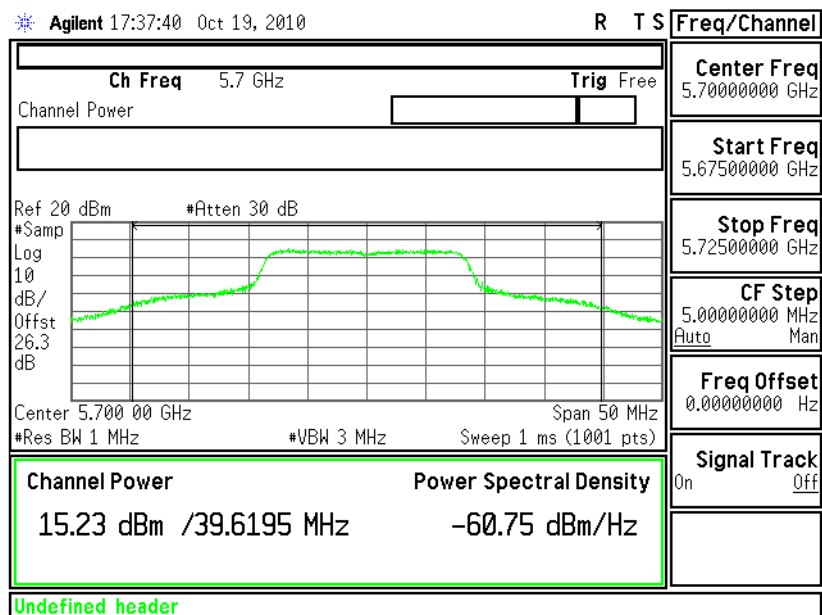




Output Power Plot on 802.11a Channel 140 - Chain 0

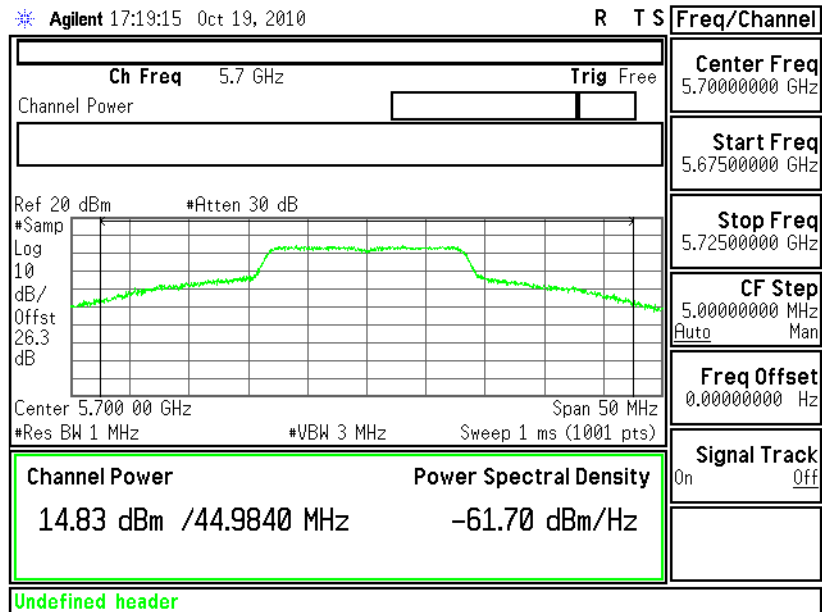


Output Power Plot on 802.11a Channel 140 - Chain 1





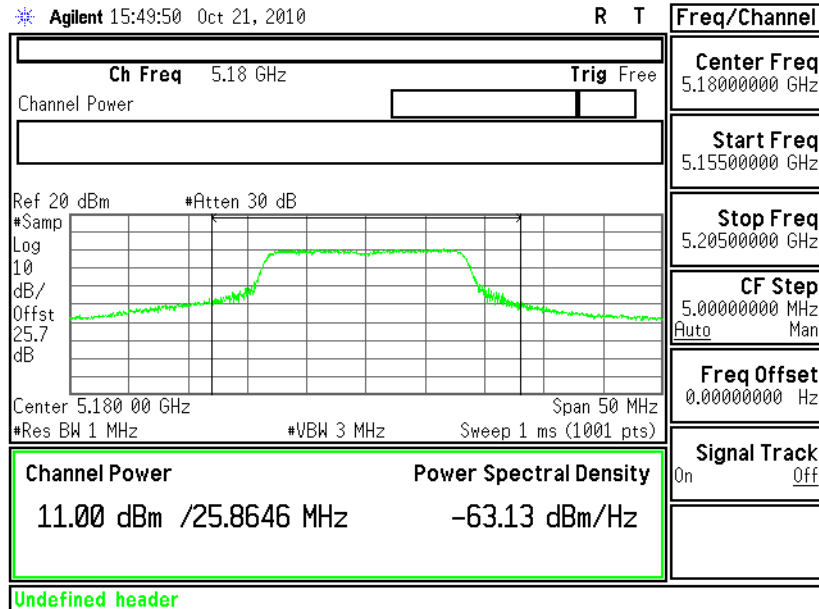
Output Power Plot on 802.11a Channel 140 - Chain 2



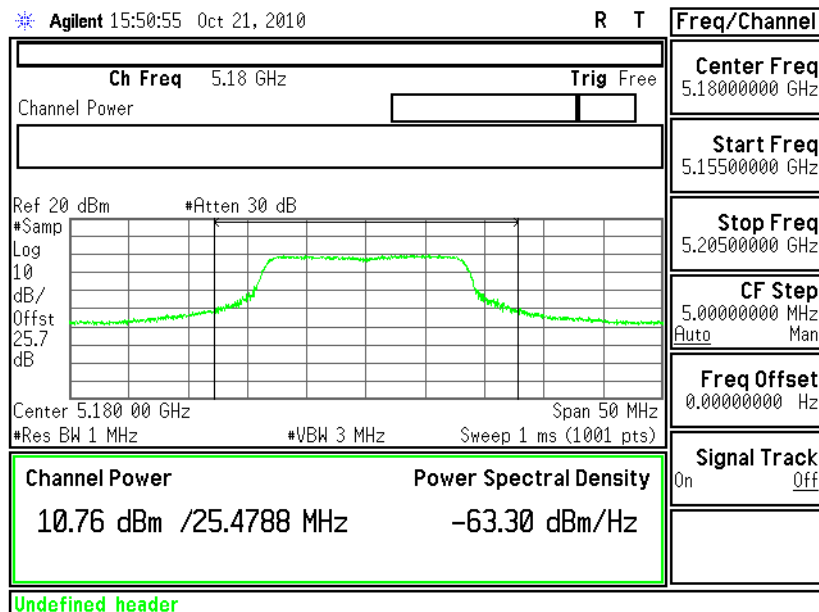


<Normal Mode: 2x3>

Output Power Plot on 802.11a Channel 36 - Chain 0

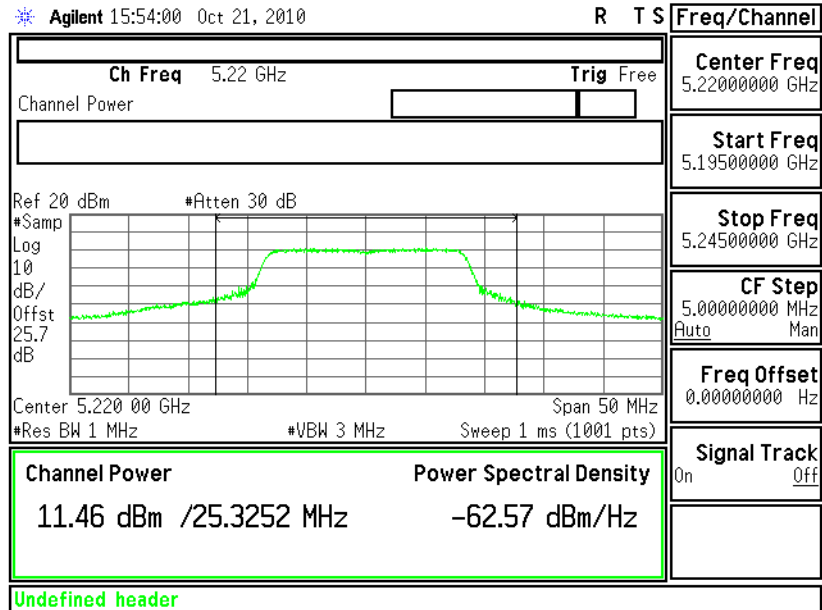


Output Power Plot on 802.11a Channel 36 - Chain 1

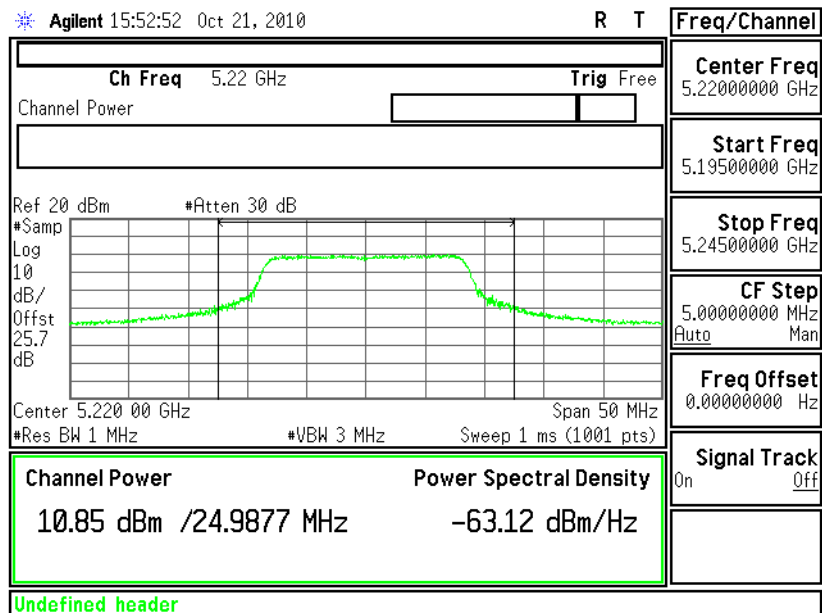




Output Power Plot on 802.11a Channel 44 - Chain 0



Output Power Plot on 802.11a Channel 44 - Chain 1

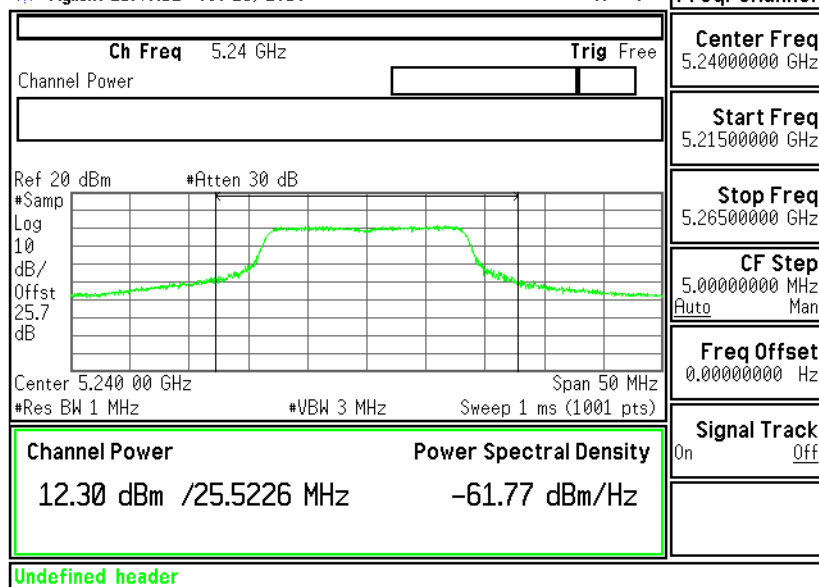




Output Power Plot on 802.11a Channel 48 – Chain 0

Agilent 21:49:12 Oct 25, 2010

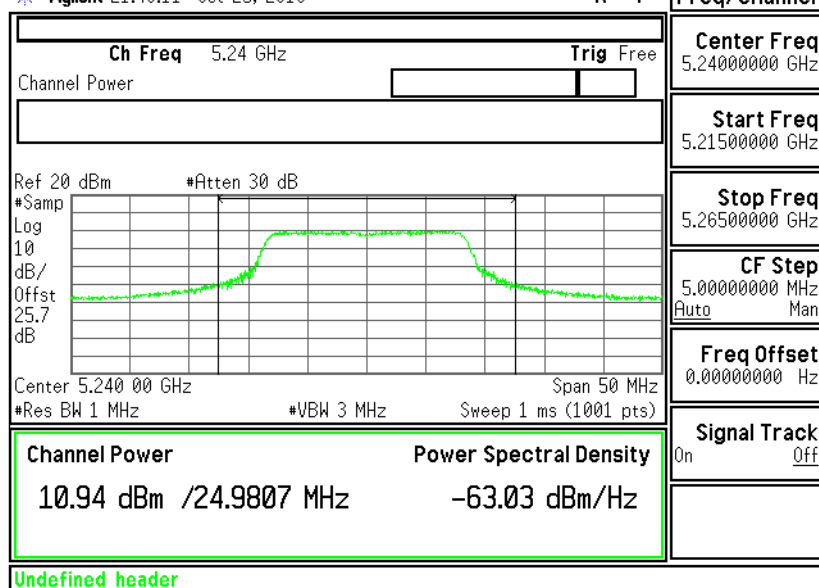
R T



Output Power Plot on 802.11a Channel 48 - Chain 1

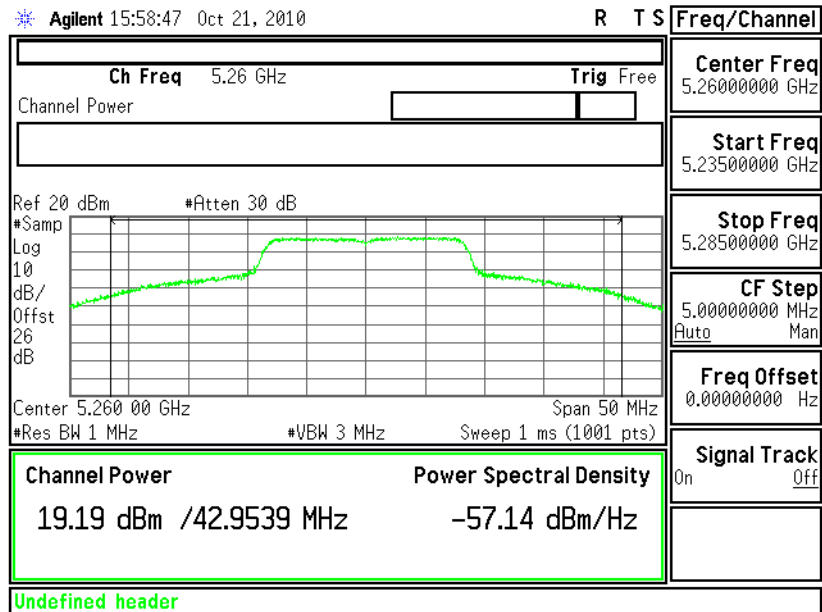
Agilent 21:48:11 Oct 25, 2010

R T

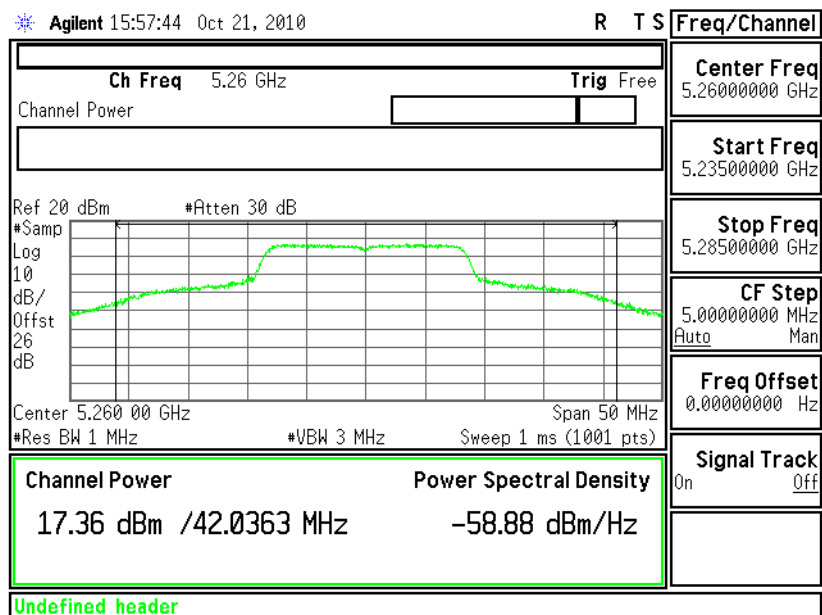




Output Power Plot on 802.11a Channel 52 - Chain 0

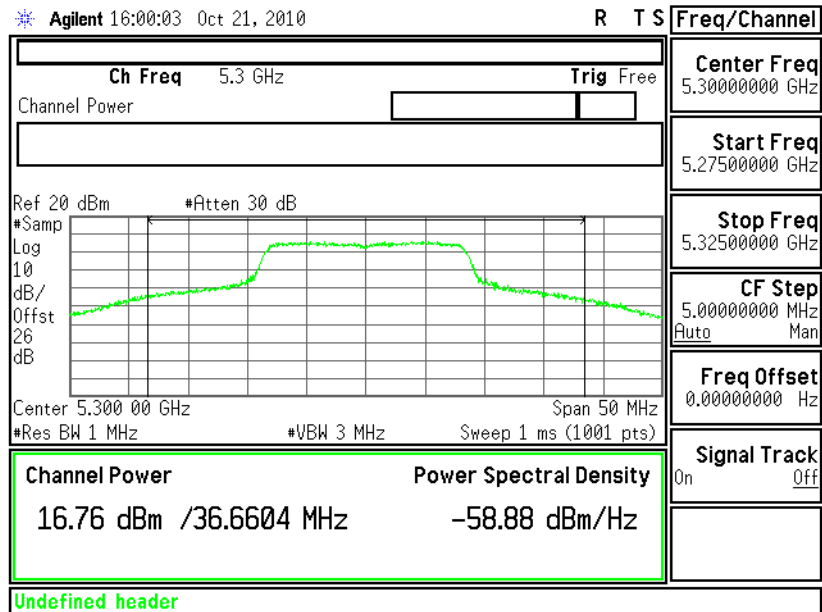


Output Power Plot on 802.11a Channel 52 - Chain 1

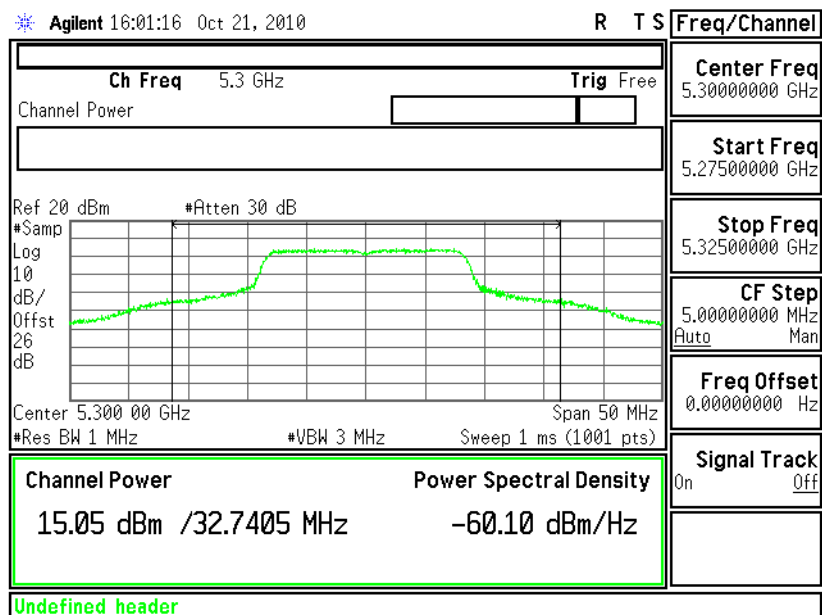




Output Power Plot on 802.11a Channel 60 - Chain 0



Output Power Plot on 802.11a Channel 60 - Chain 1

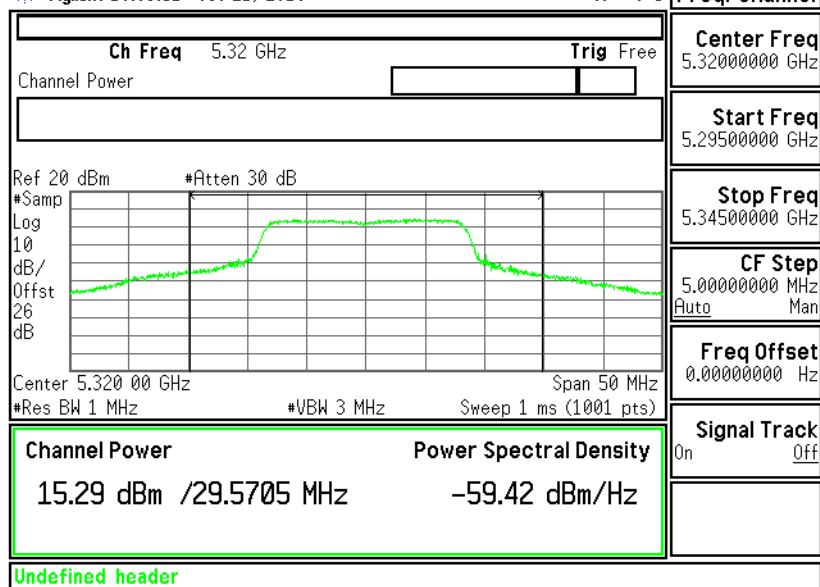




Output Power Plot on 802.11a Channel 64 - Chain 0

Agilent 16:03:51 Oct 21, 2010

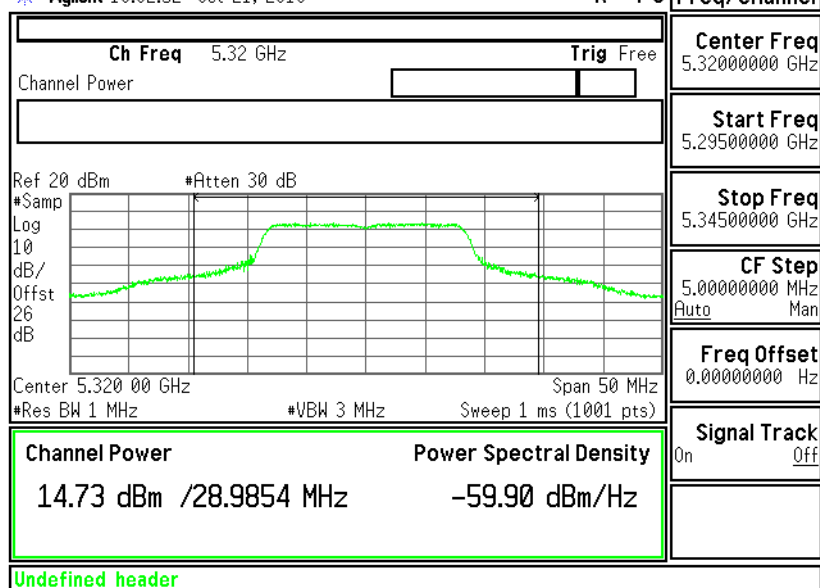
R T S



Output Power Plot on 802.11a Channel 64 - Chain 1

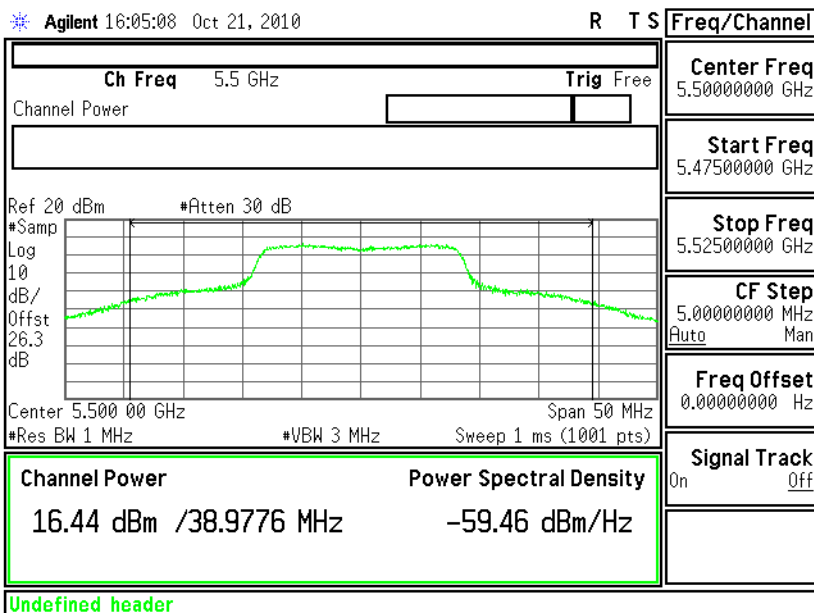
Agilent 16:02:52 Oct 21, 2010

R T S

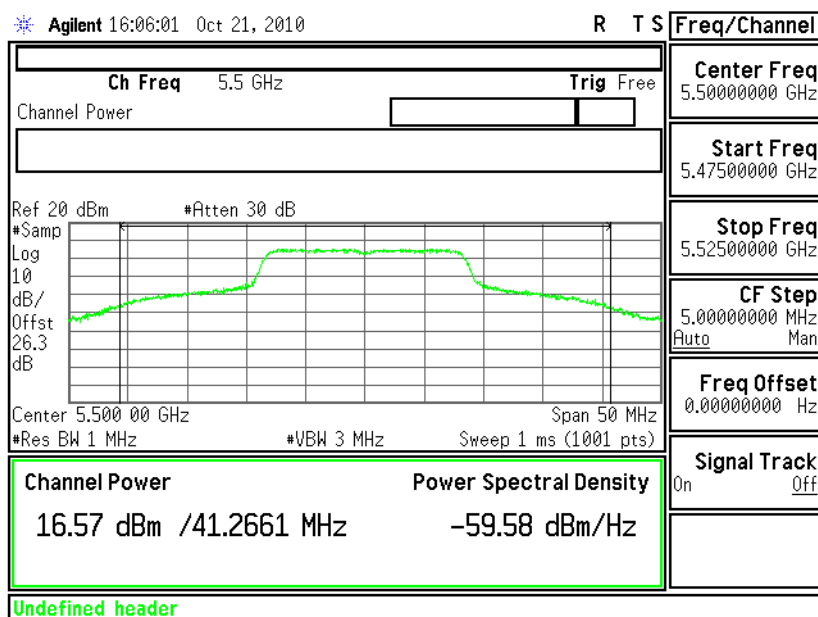




Output Power Plot on 802.11a Channel 100 – Chain 0

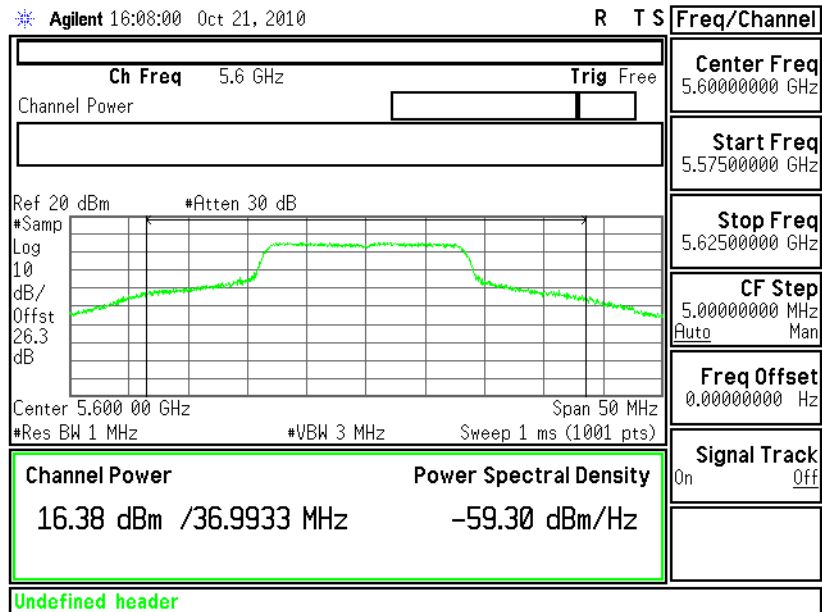


Output Power Plot on 802.11a Channel 100 - Chain 1

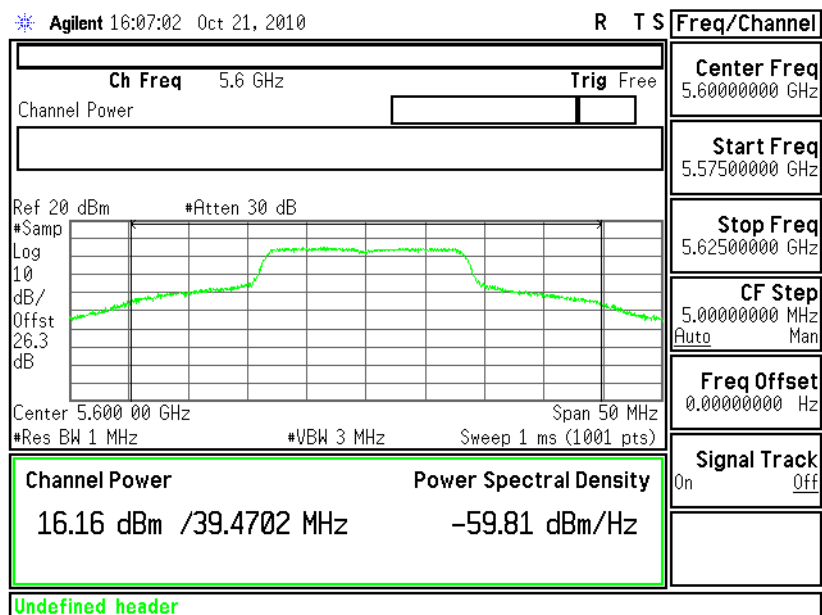




Output Power Plot on 802.11a Channel 120 - Chain 0

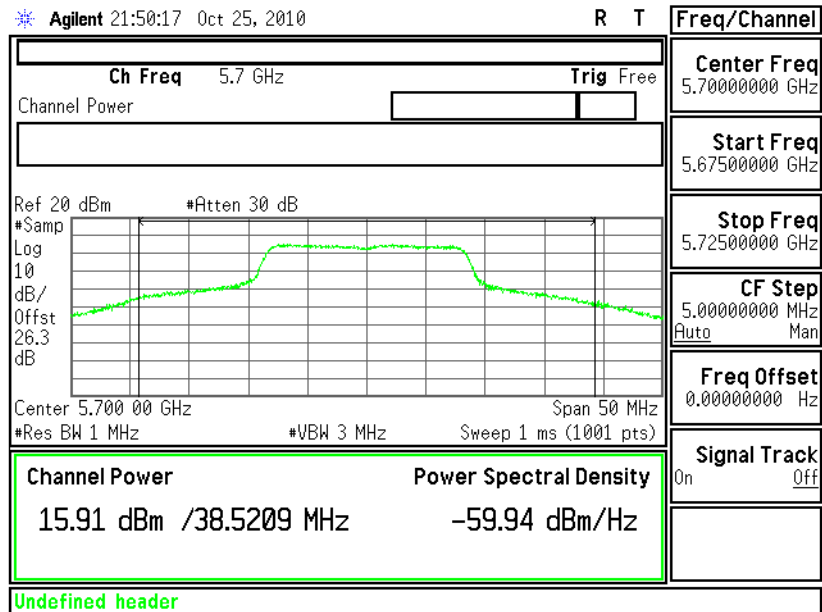


Output Power Plot on 802.11a Channel 120 - Chain 1

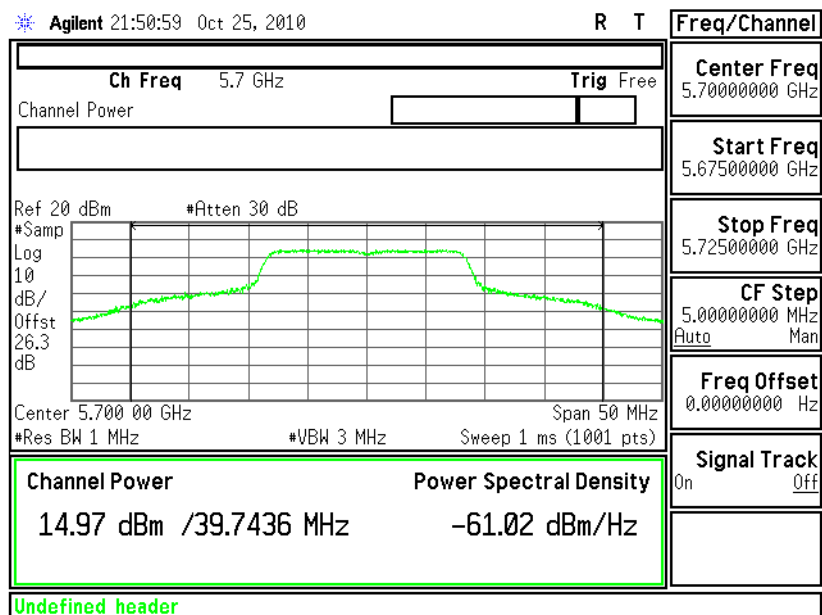




Output Power Plot on 802.11a Channel 140 - Chain 0



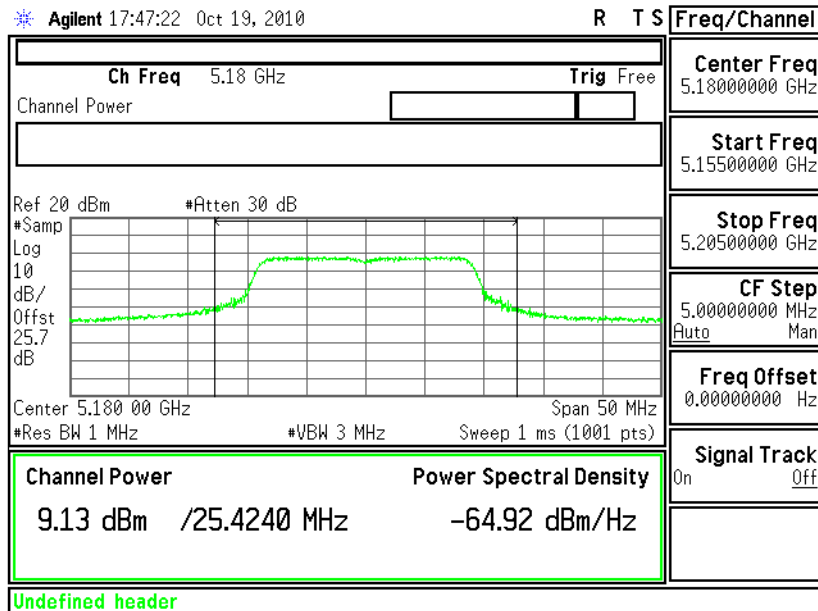
Output Power Plot on 802.11a Channel 140 - Chain 1



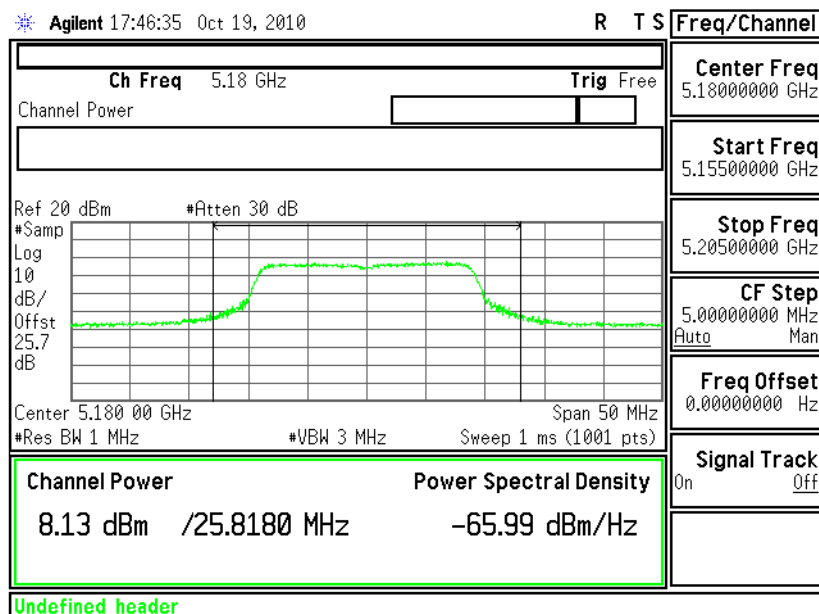


<Beam-Forming On: 3x3>

Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 1

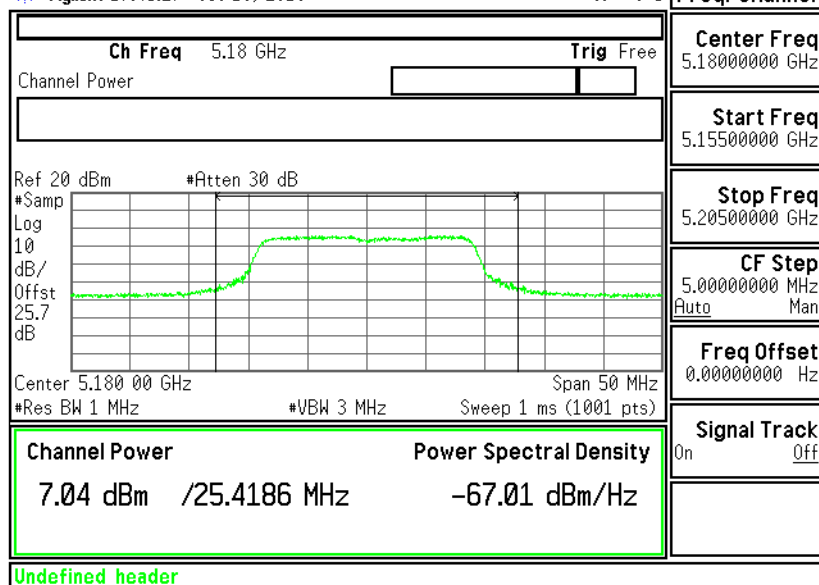




Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 2

Agilent 17:45:27 Oct 19, 2010

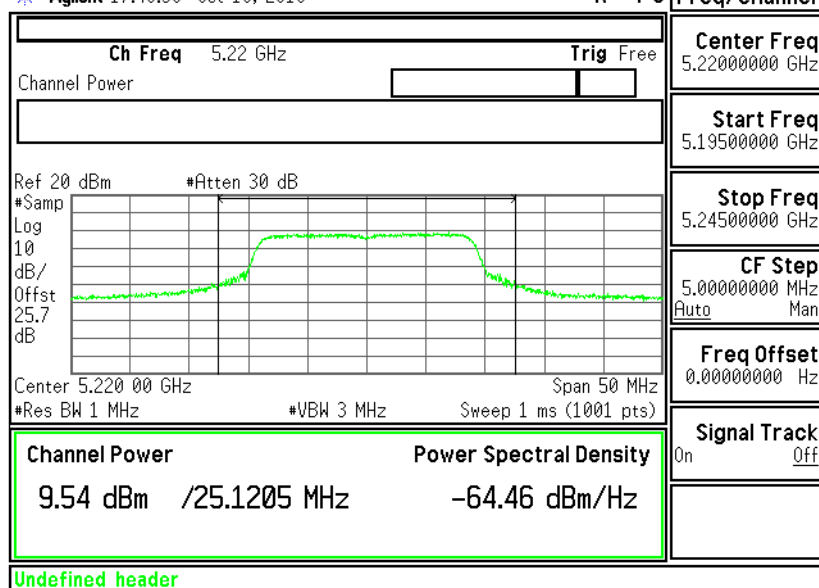
R T S



Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 0

Agilent 17:48:39 Oct 19, 2010

R T S

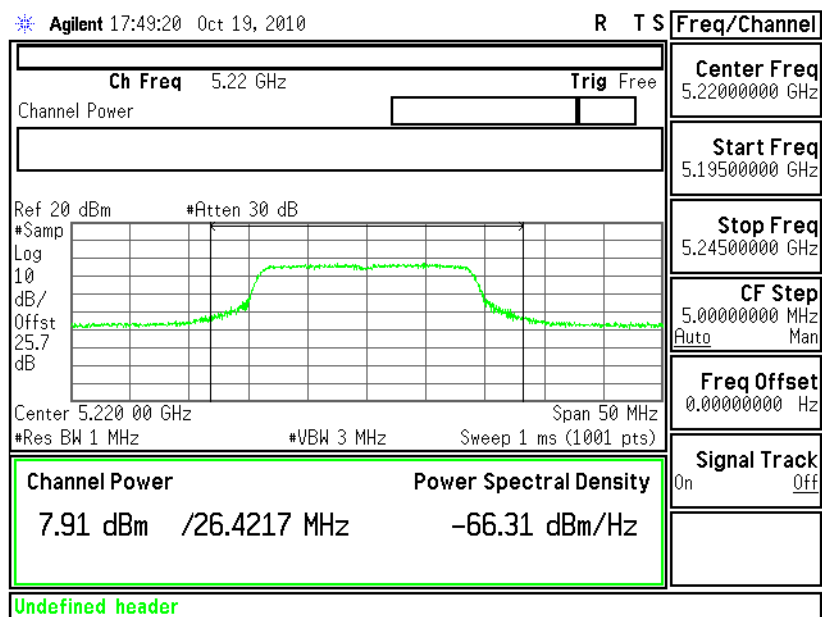




Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 1

Agilent 17:49:20 Oct 19, 2010

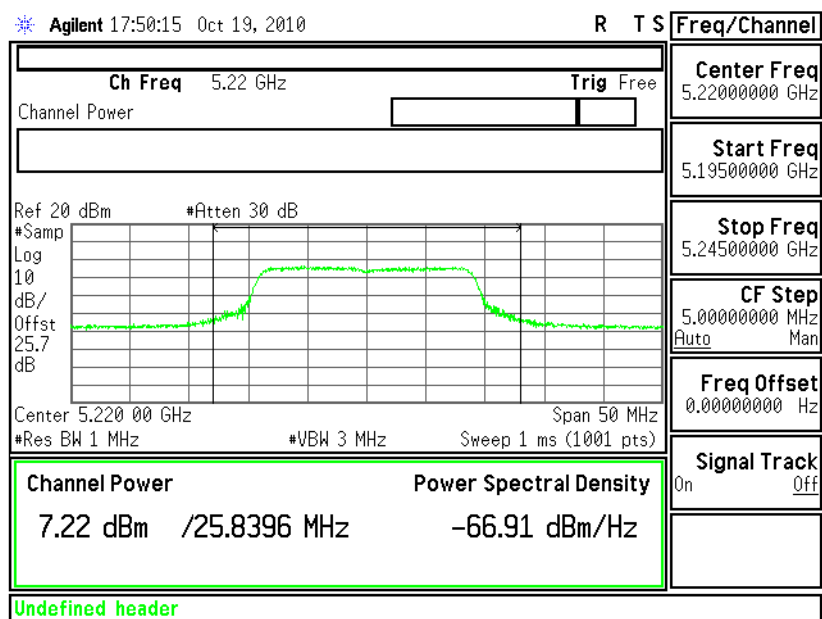
R T S



Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 2

Agilent 17:50:15 Oct 19, 2010

R T S

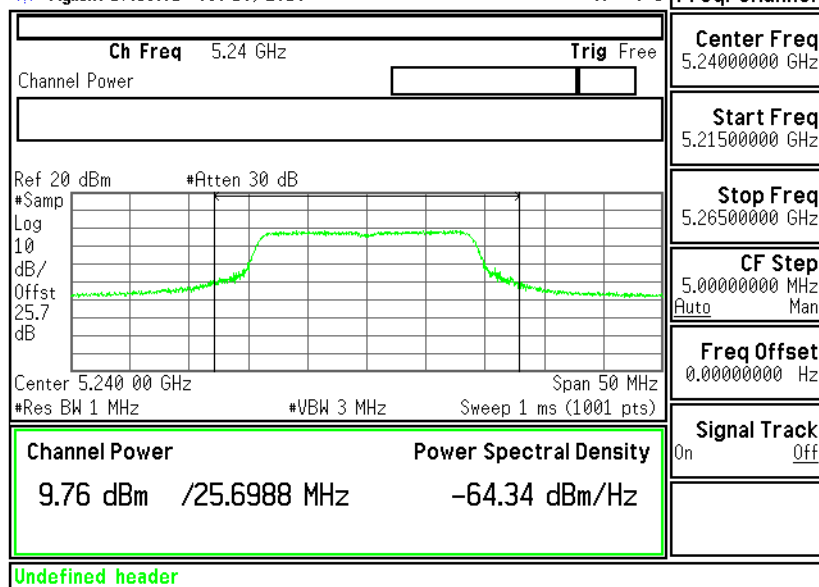




Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 0

Agilent 17:53:01 Oct 19, 2010

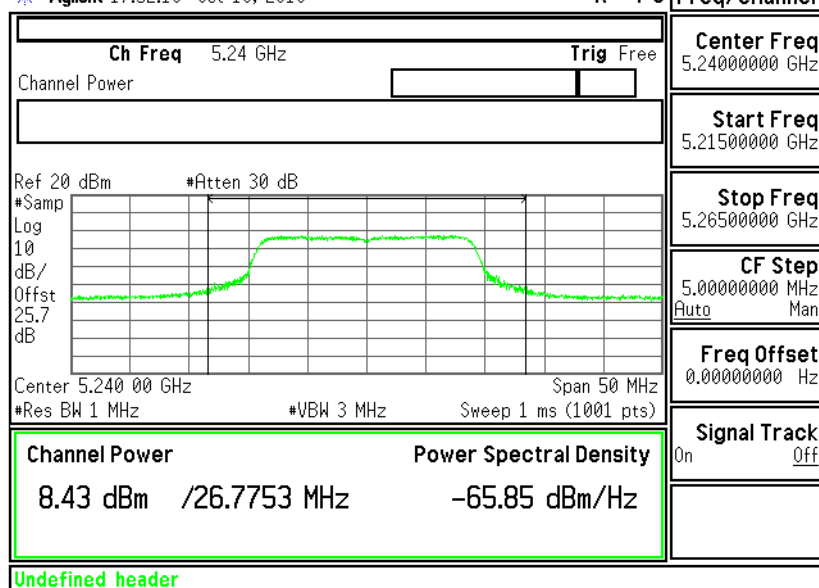
R T S



Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 1

Agilent 17:52:16 Oct 19, 2010

R T S

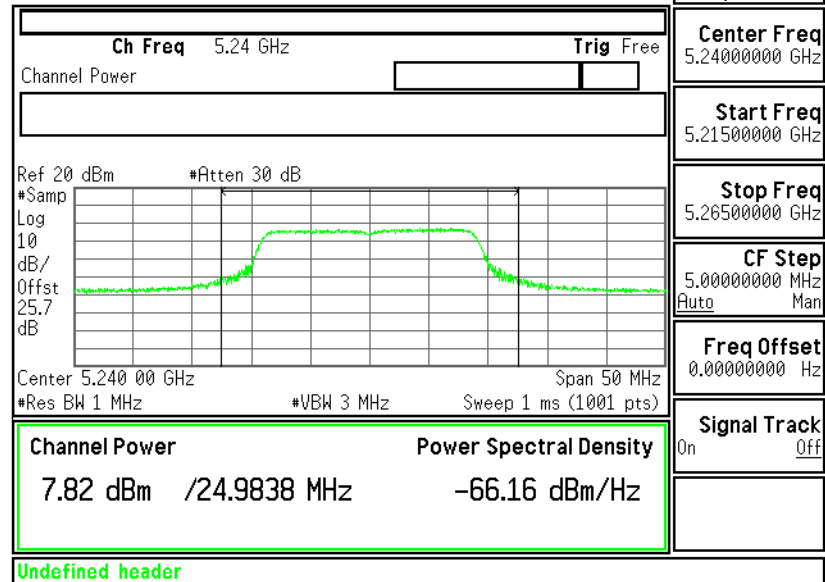




Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 2

Agilent 17:51:05 Oct 19, 2010

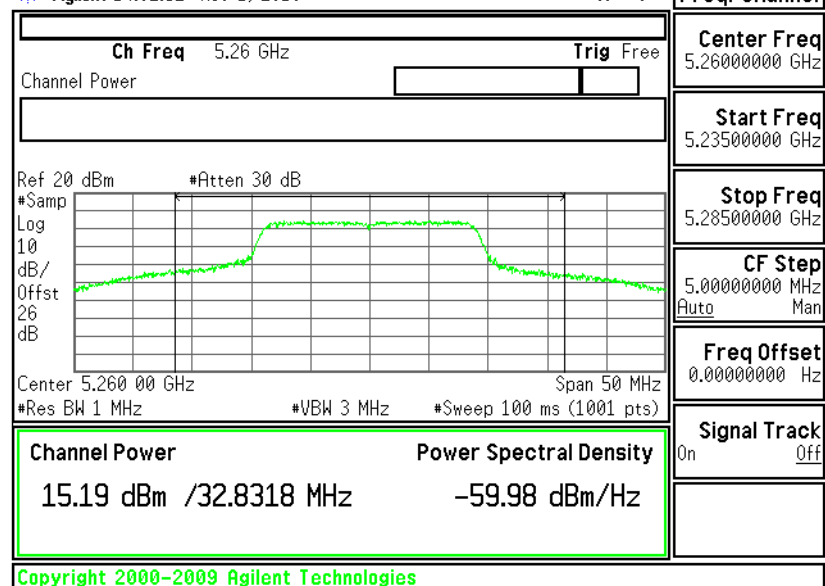
R T S



Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 0

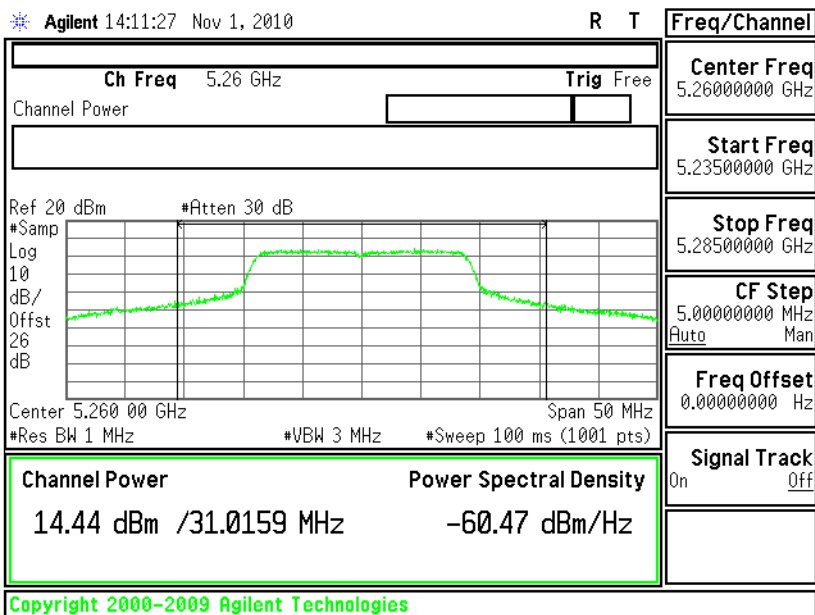
Agilent 14:02:52 Nov 1, 2010

R T

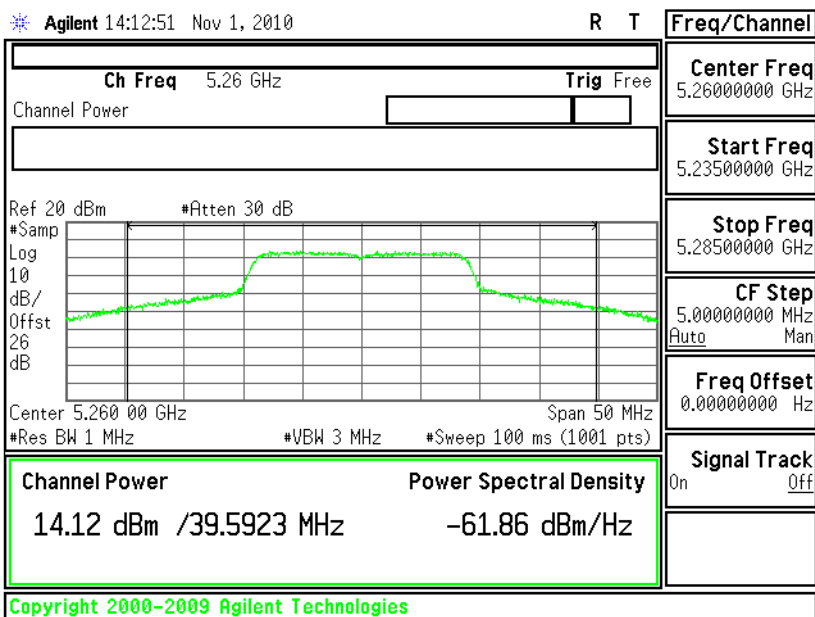




Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 1

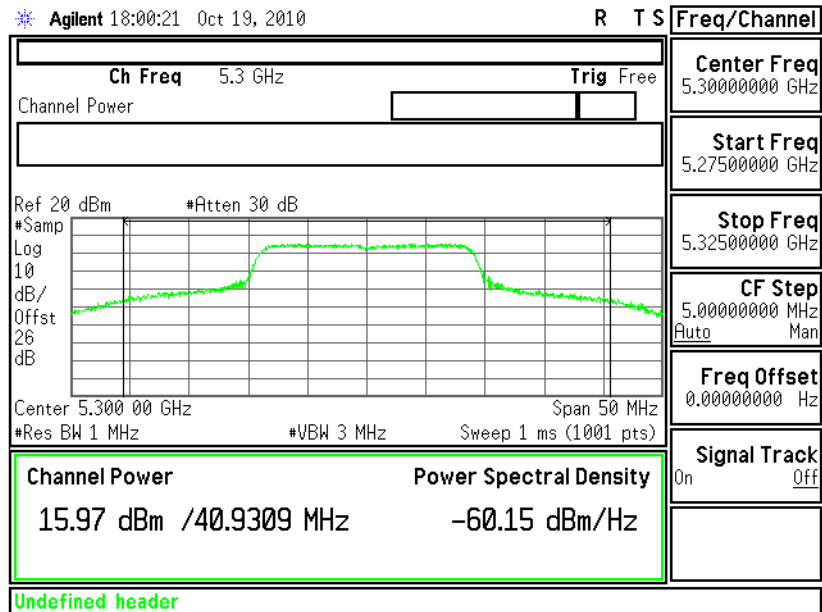


Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 2

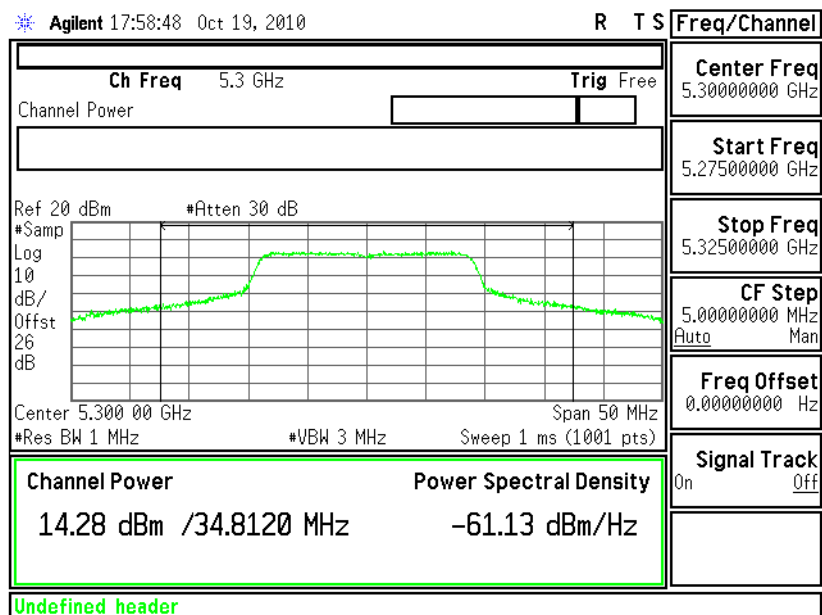




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 0

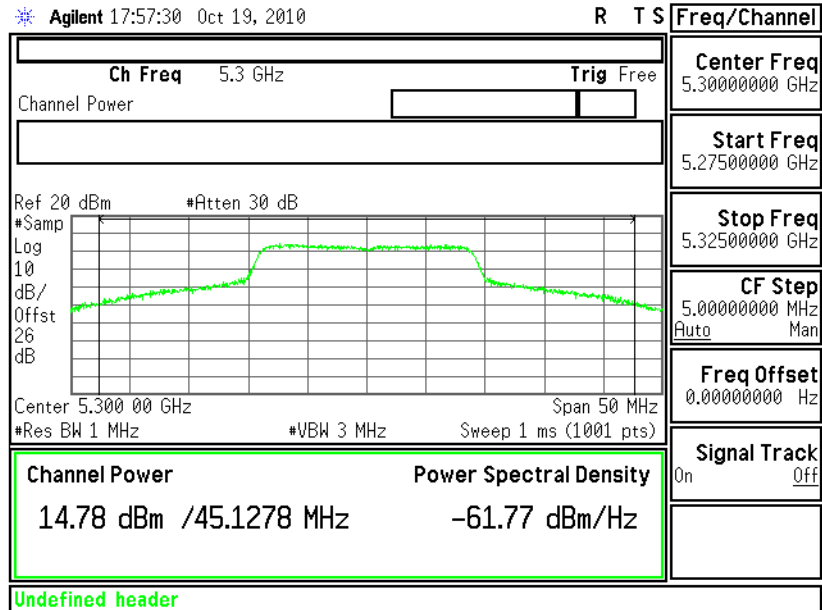


Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 1

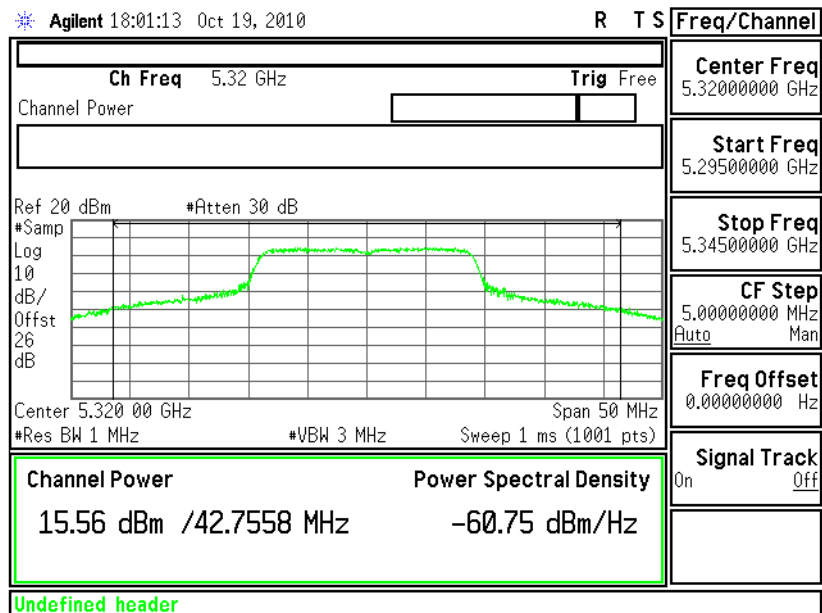




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 2

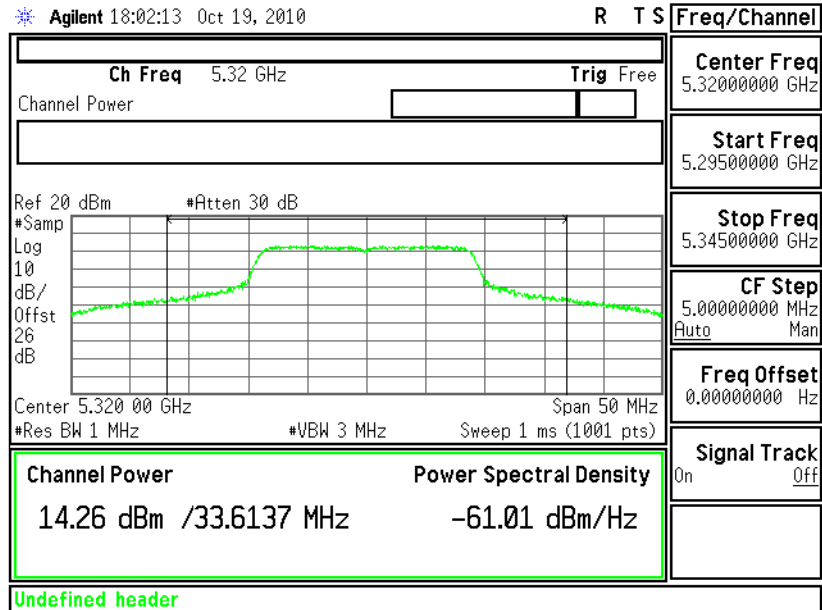


Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 0

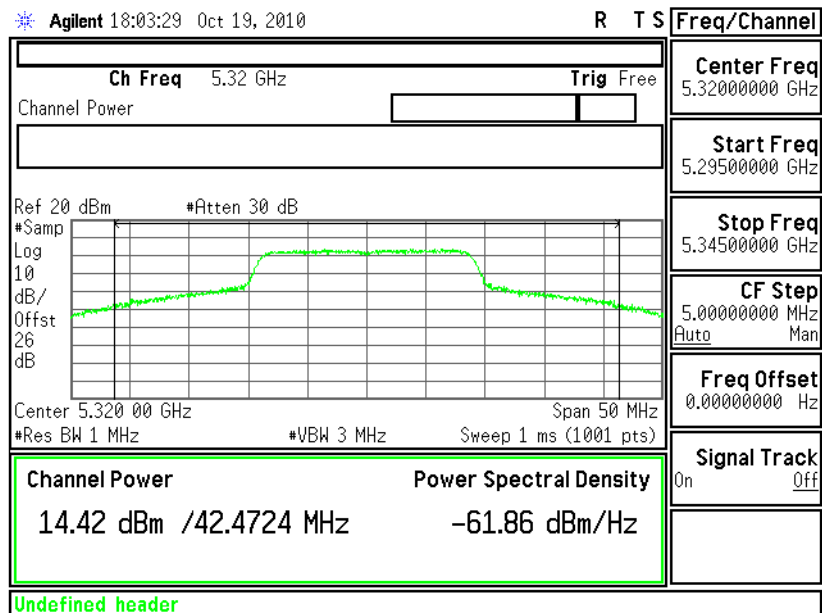




Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 1



Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 2

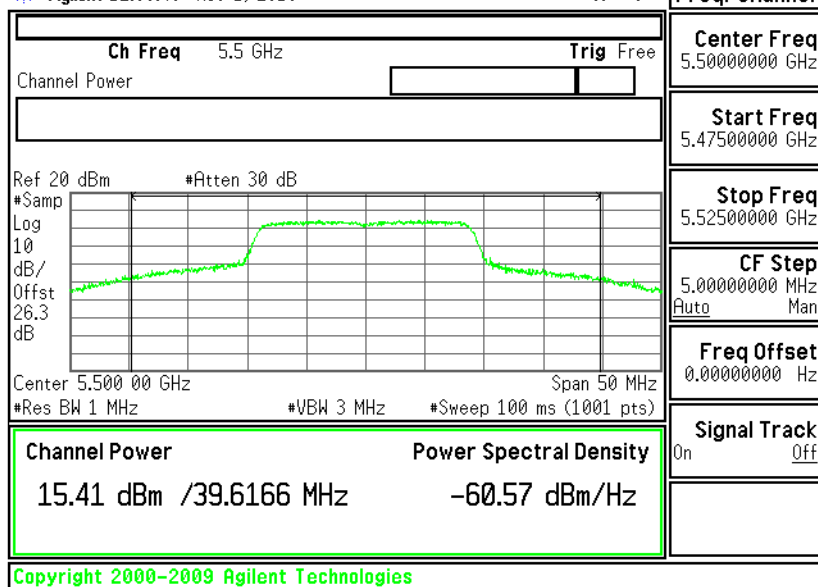




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 0

Agilent 12:09:46 Nov 1, 2010

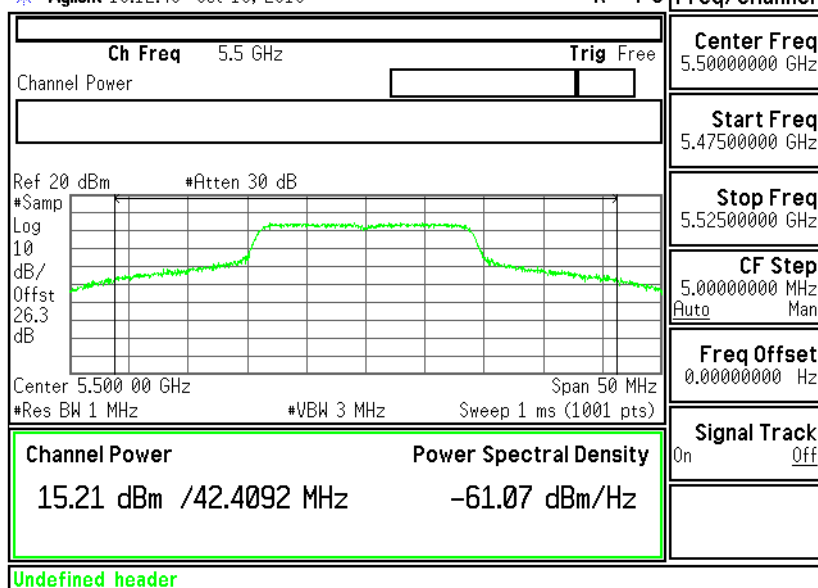
R T



Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 1

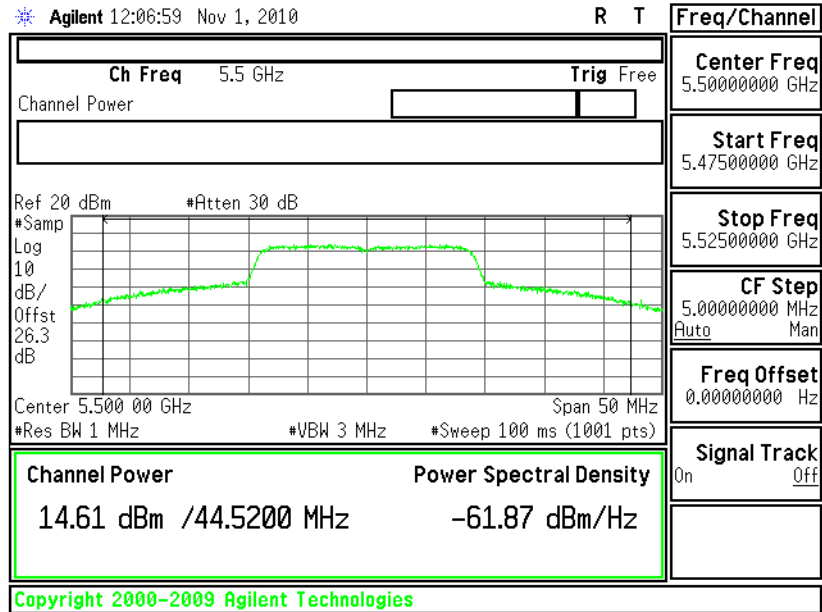
Agilent 18:12:40 Oct 19, 2010

R T S

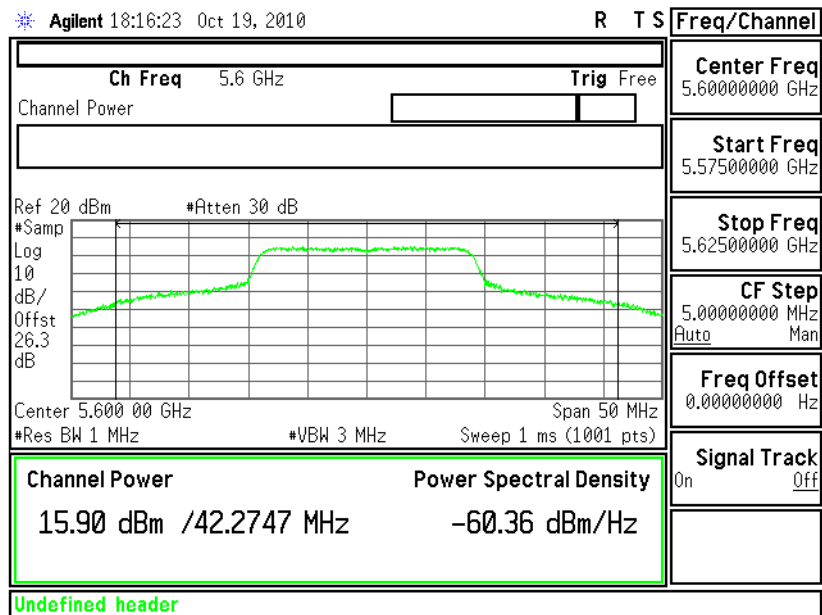




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 2

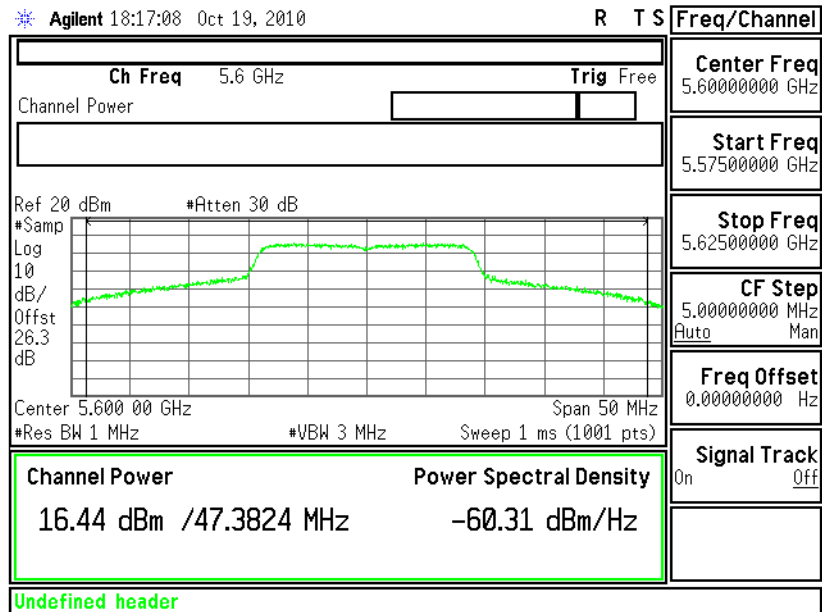


Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 0

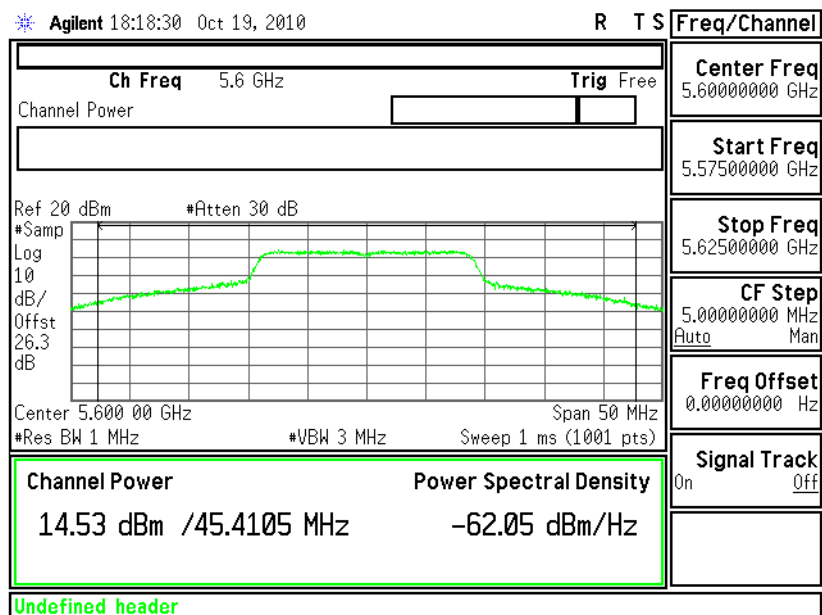




Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 1



Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 2

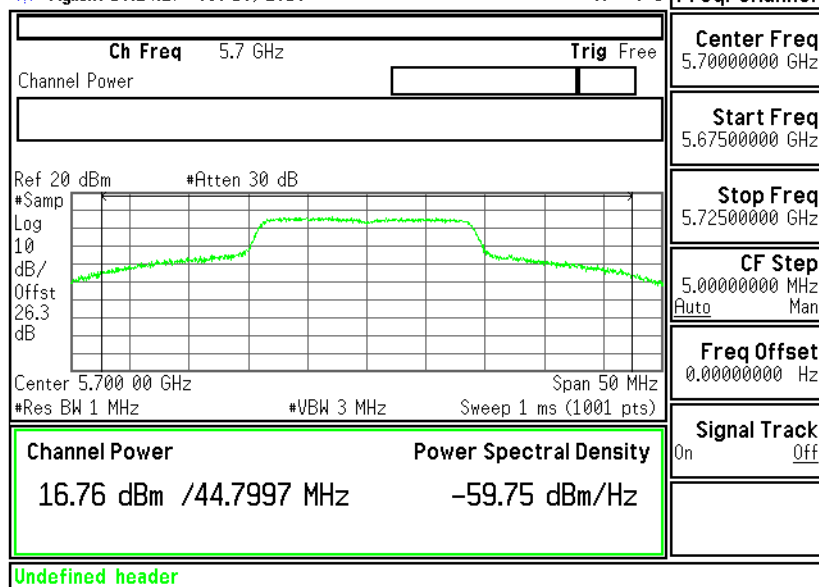




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 0

Agilent 18:24:27 Oct 19, 2010

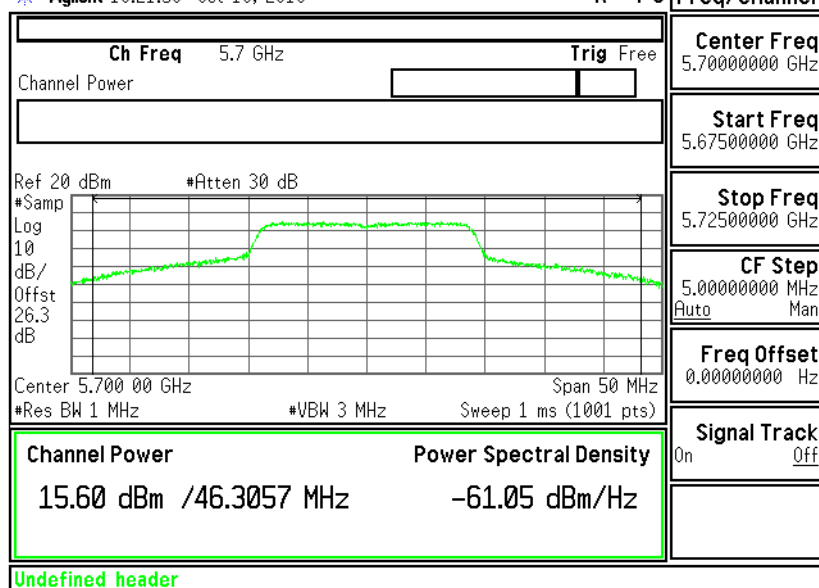
R T S



Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 1

Agilent 18:21:56 Oct 19, 2010

R T S

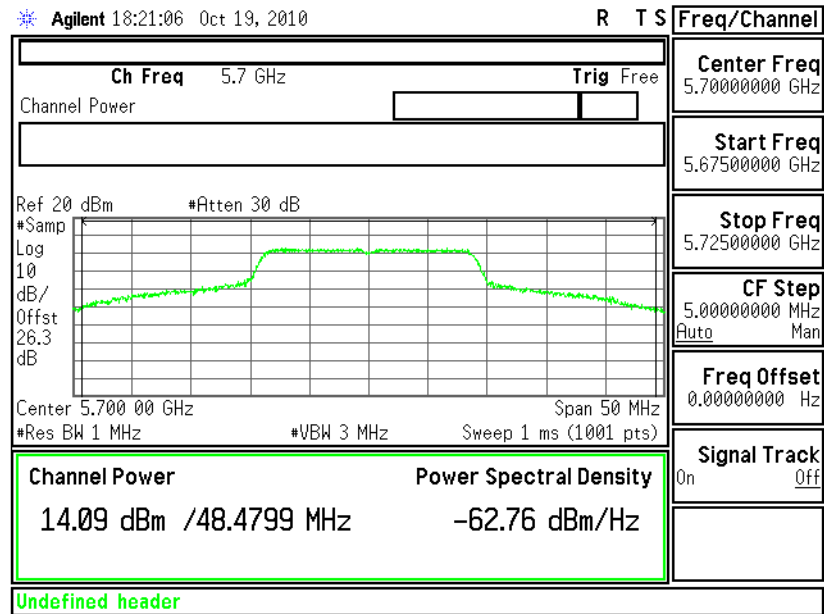




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 2

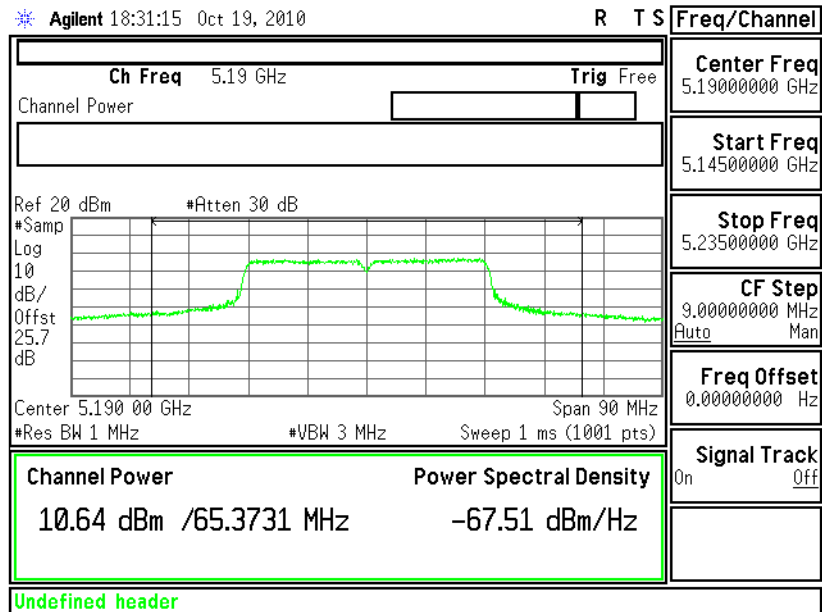
Agilent 18:21:06 Oct 19, 2010

R T S

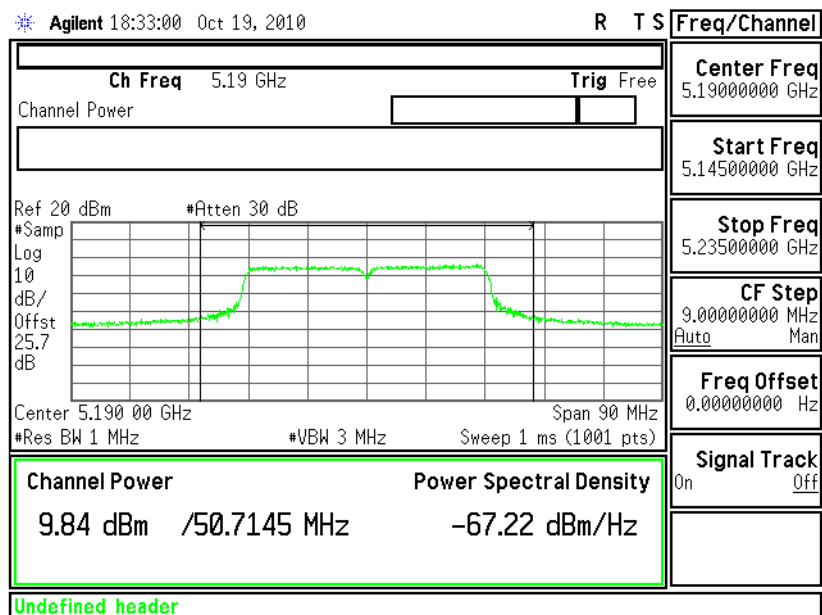




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 0

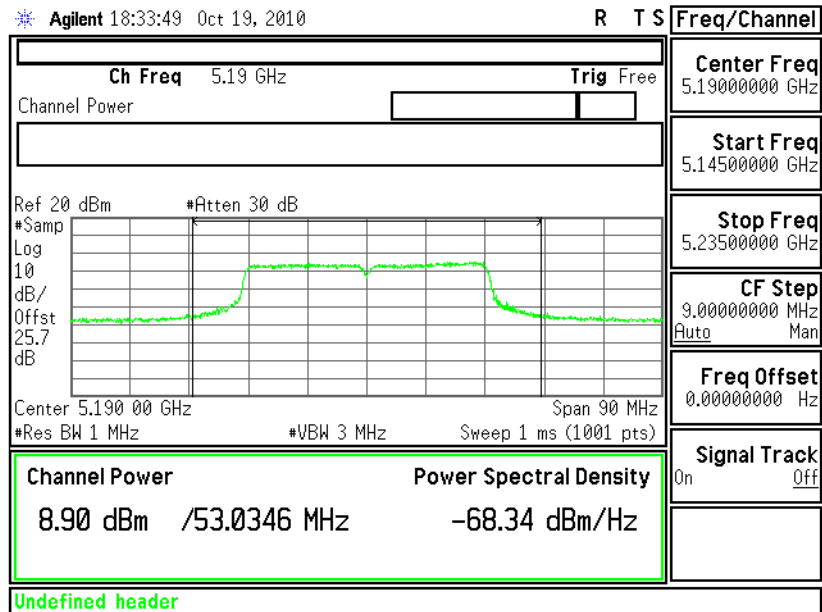


Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 1

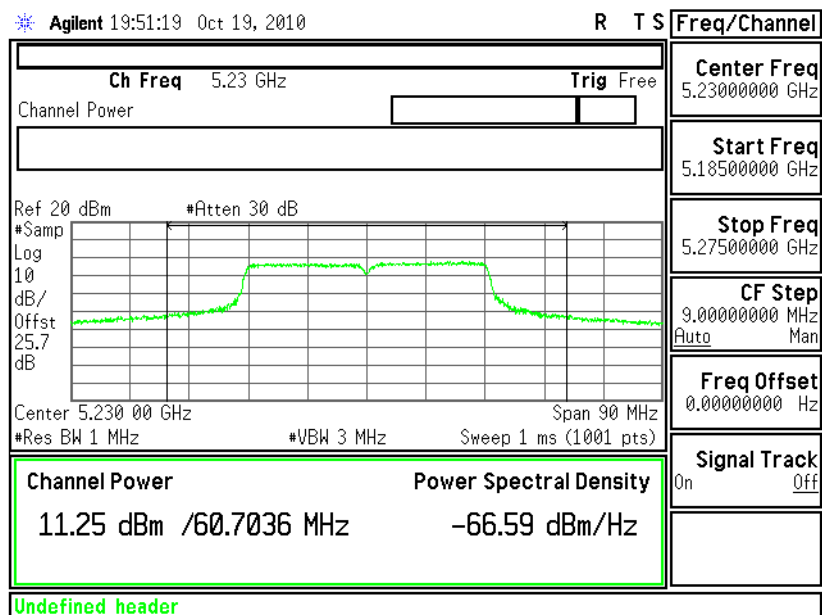




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 2

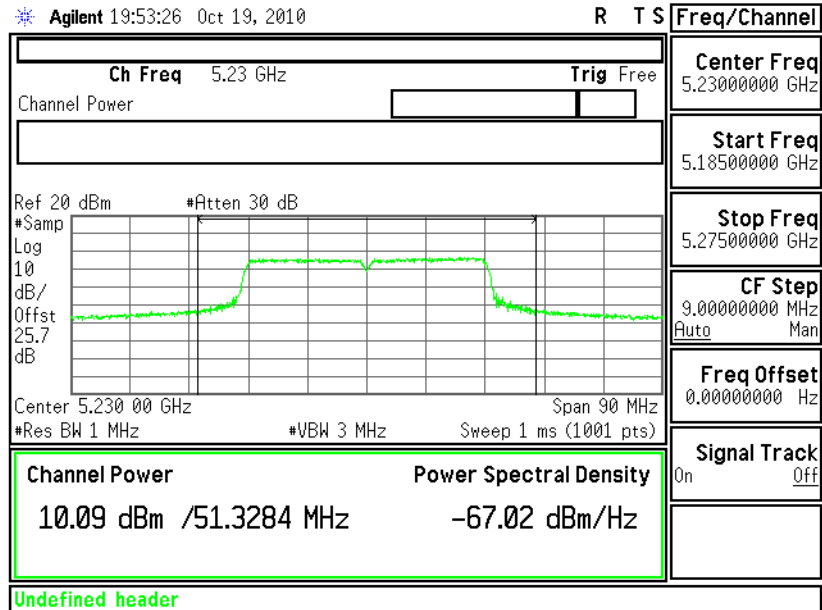


Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 0

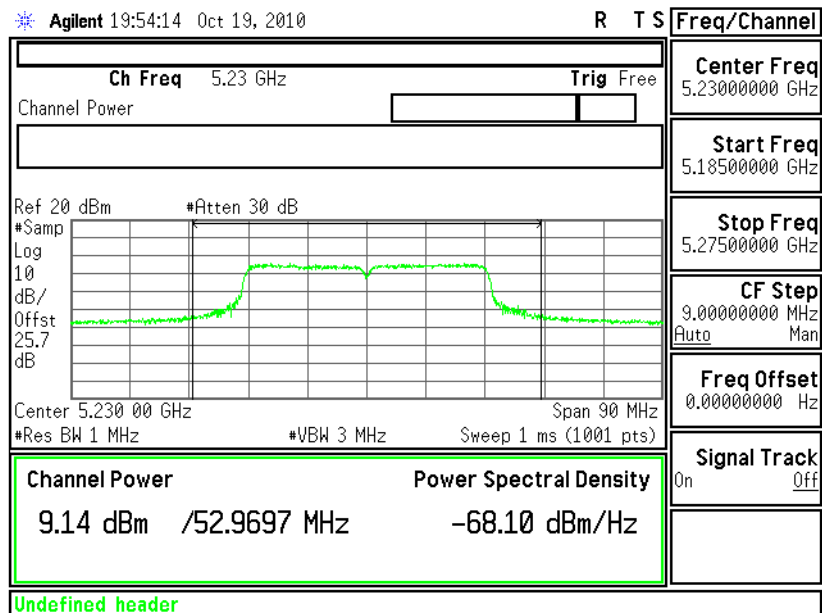




Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 1



Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 2

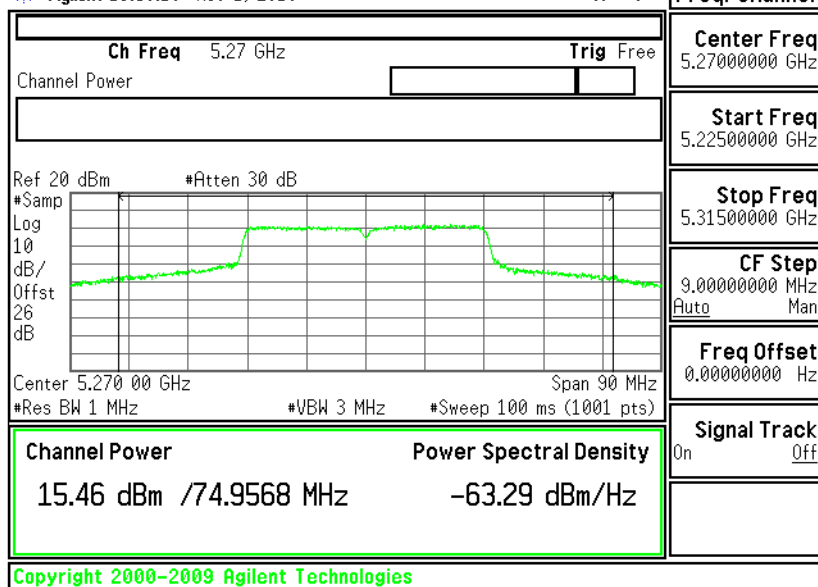




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 0

Agilent 13:59:10 Nov 1, 2010

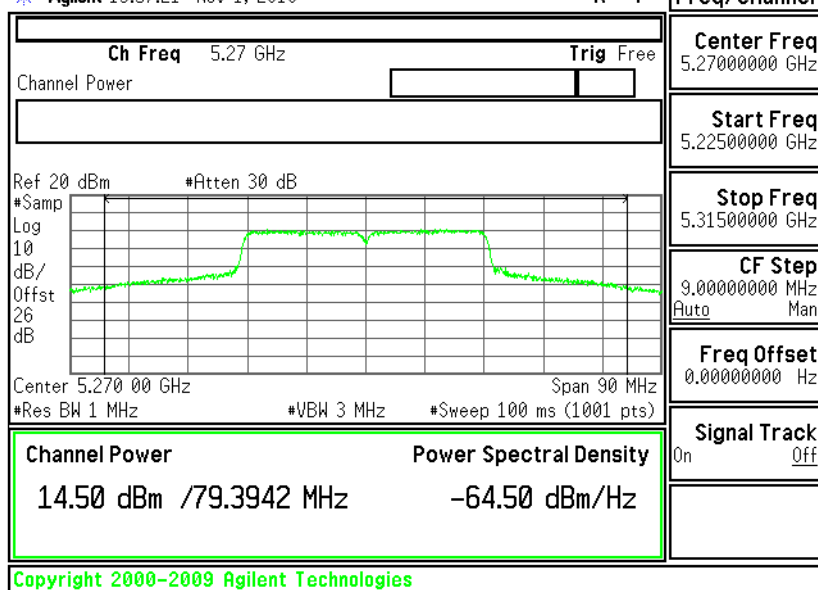
R T



Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 1

Agilent 13:57:21 Nov 1, 2010

R T

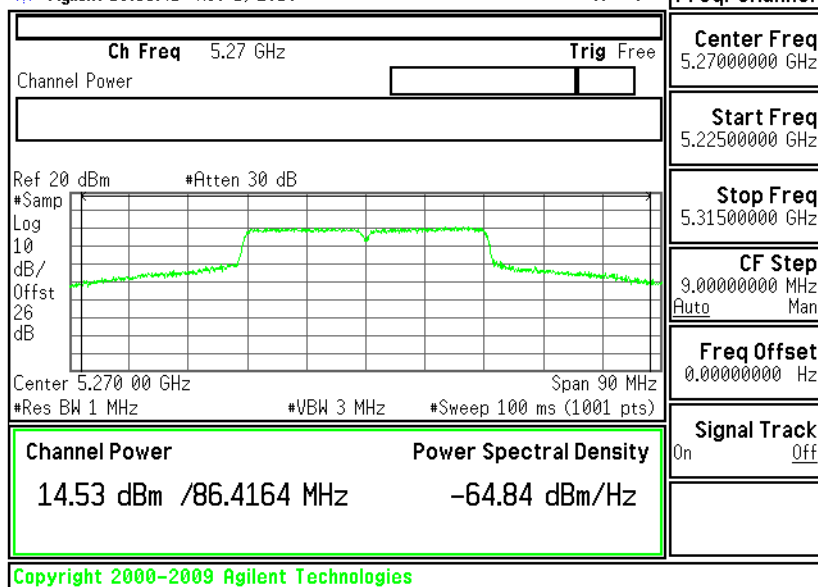




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 2

Agilent 13:55:41 Nov 1, 2010

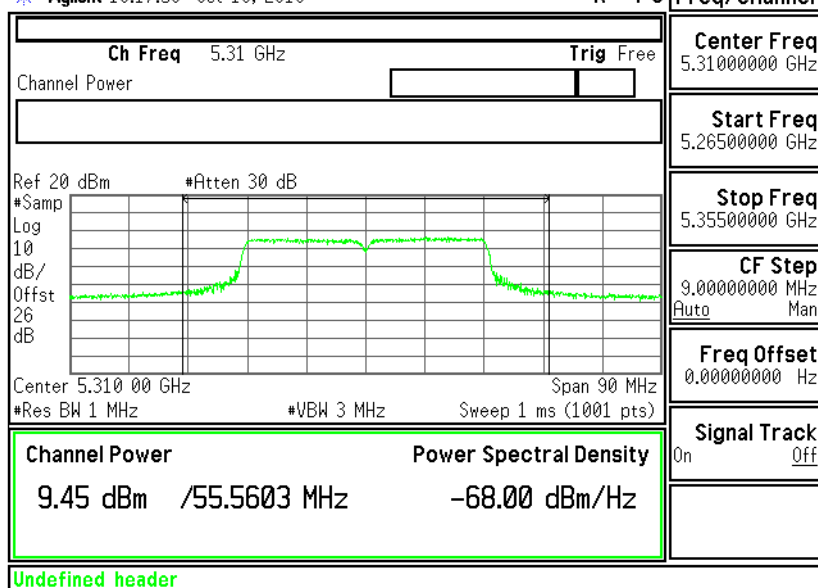
R T



Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 0

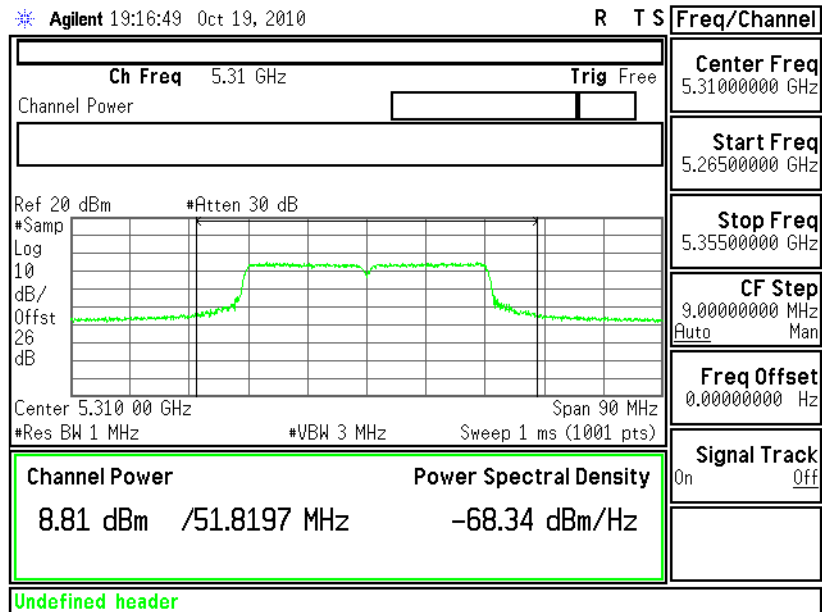
Agilent 19:17:50 Oct 19, 2010

R T S

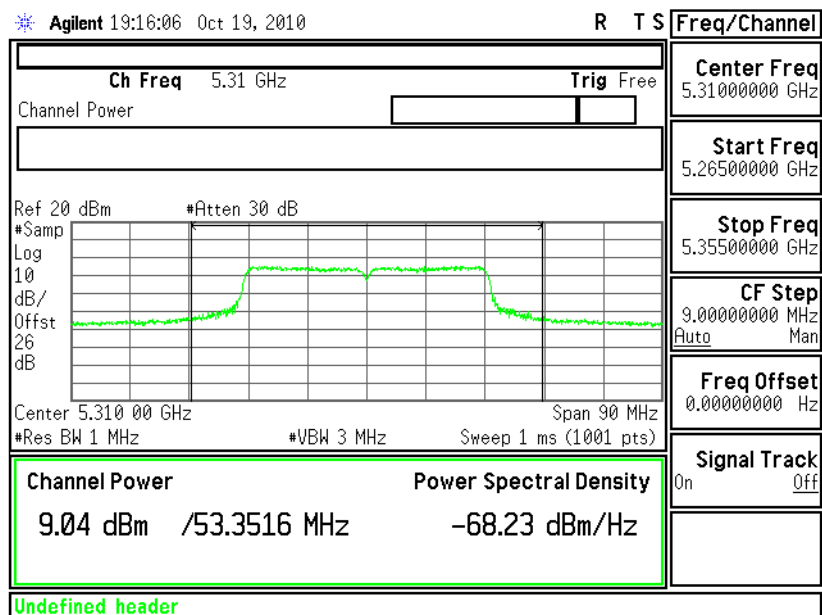




Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 1

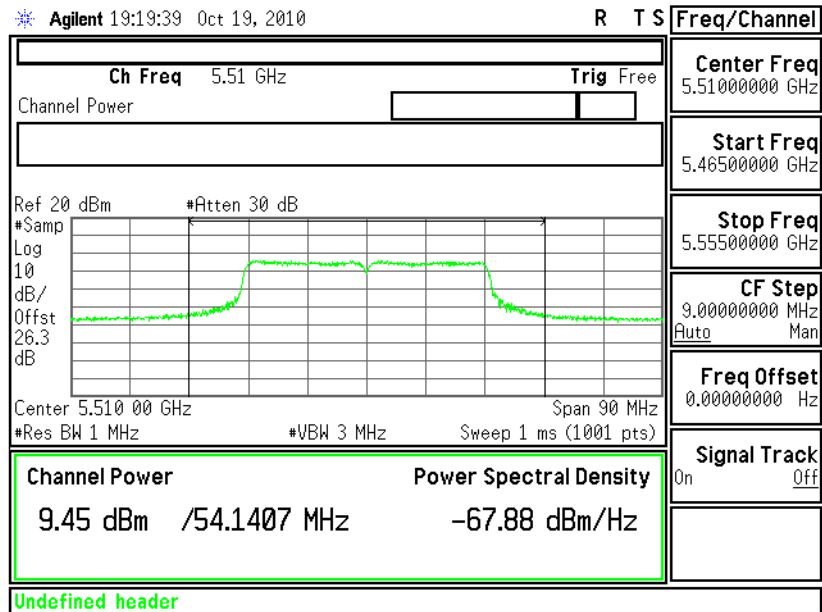


Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 2

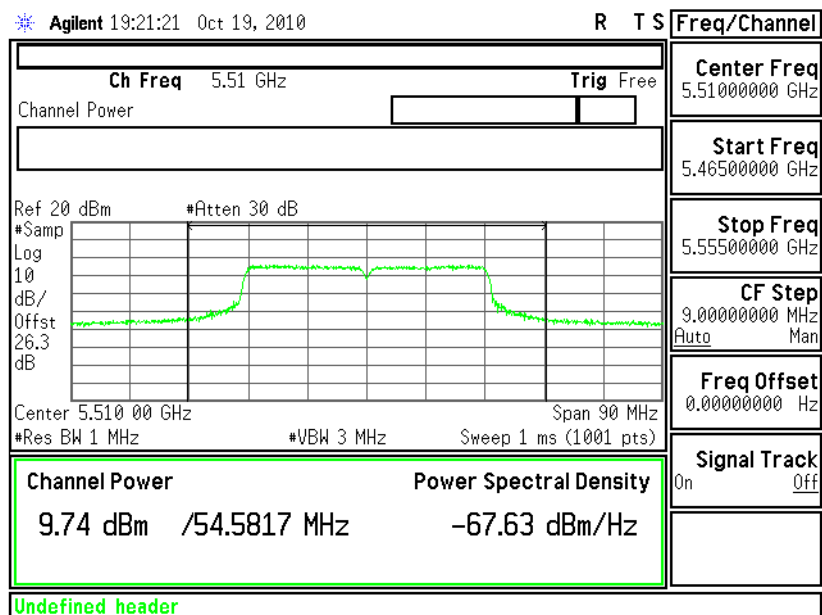




Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 1

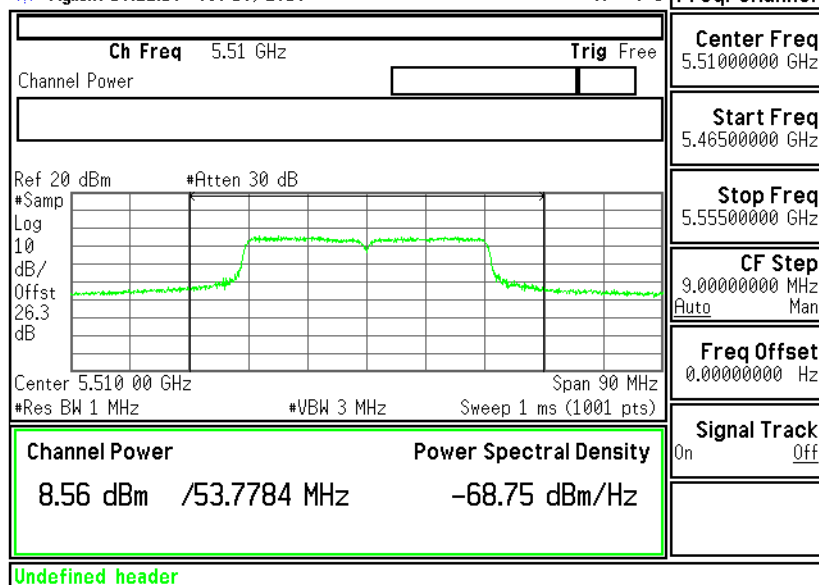




Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 2

Agilent 19:22:10 Oct 19, 2010

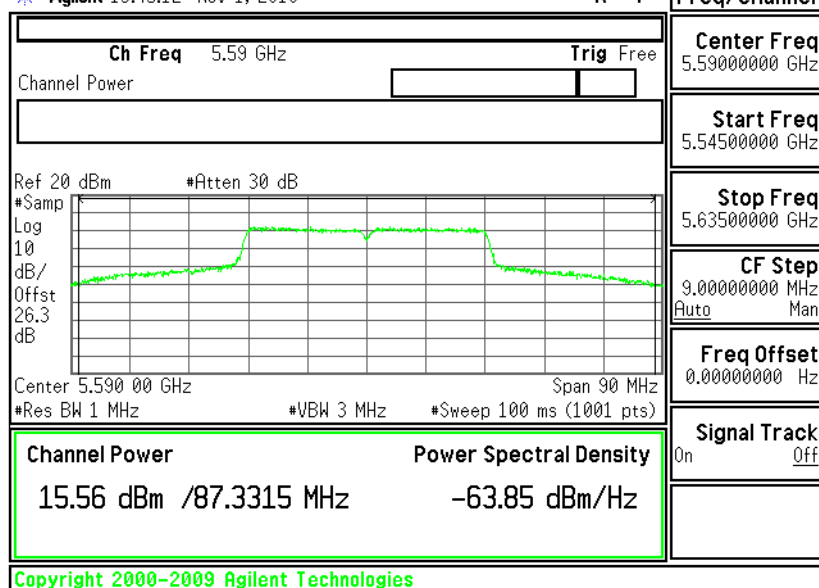
R T S



Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 0

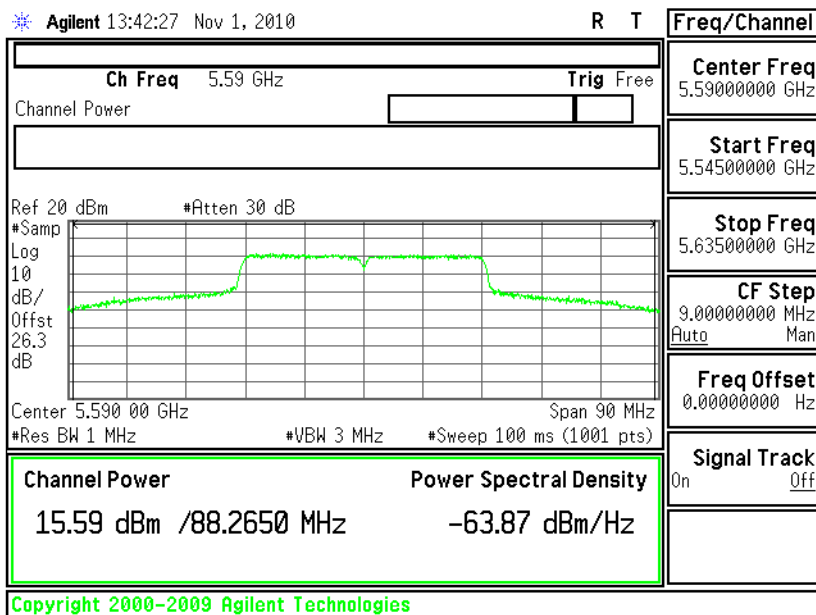
Agilent 13:45:12 Nov 1, 2010

R T

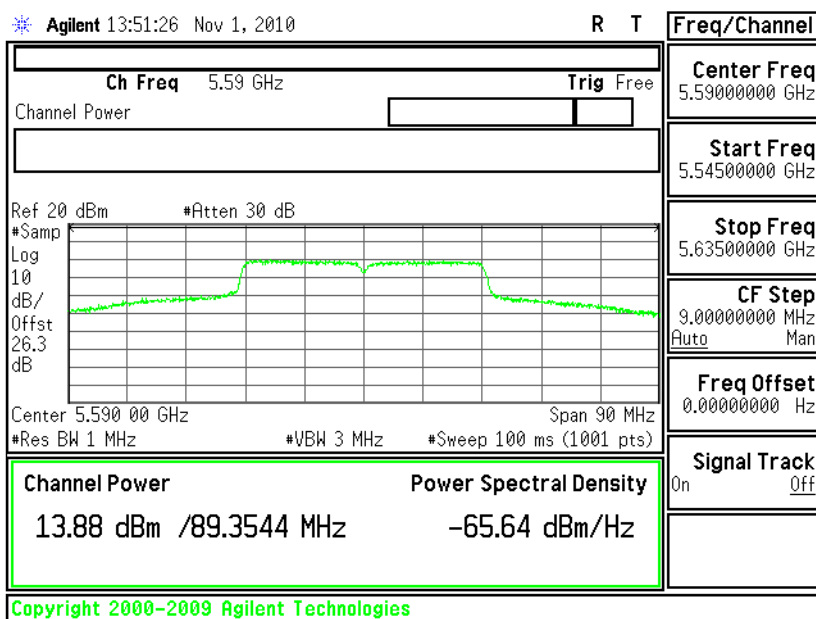




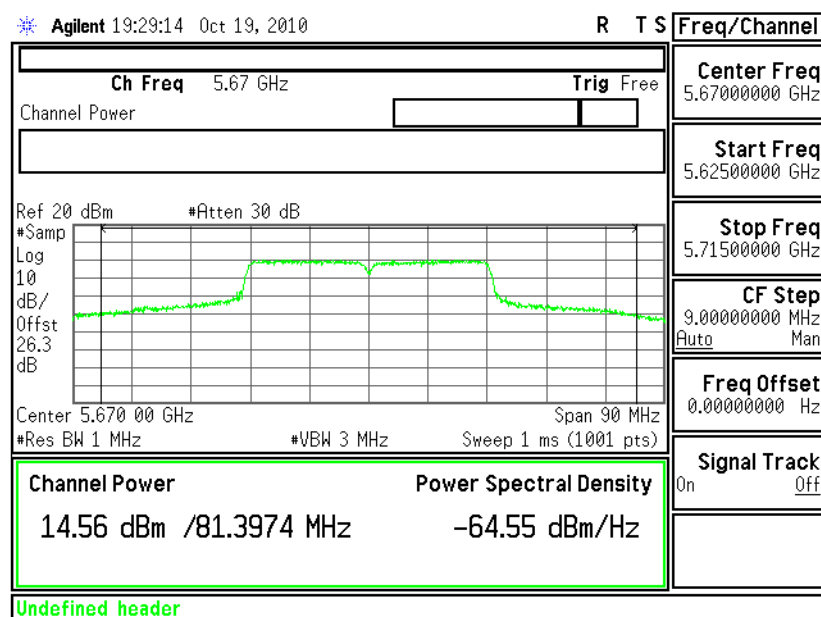
Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 1



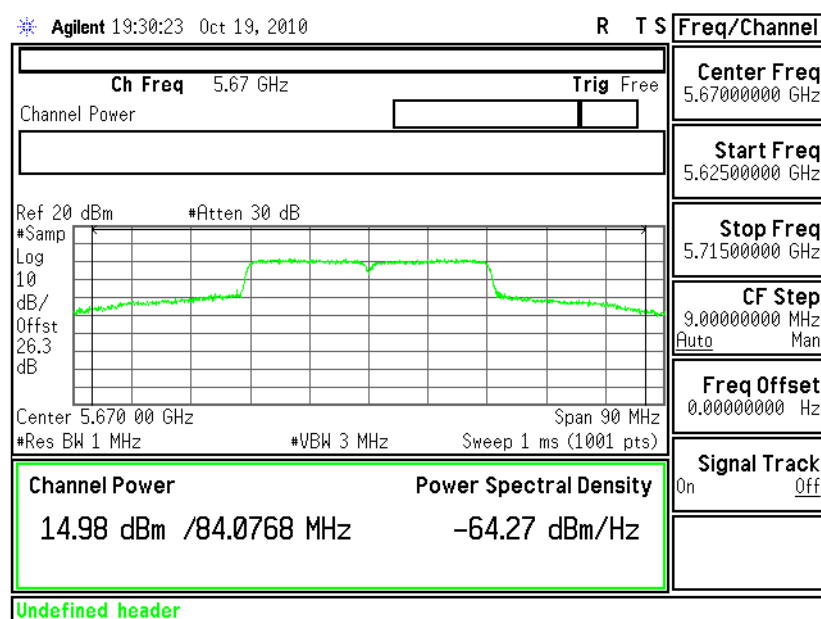
Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 2



Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 1

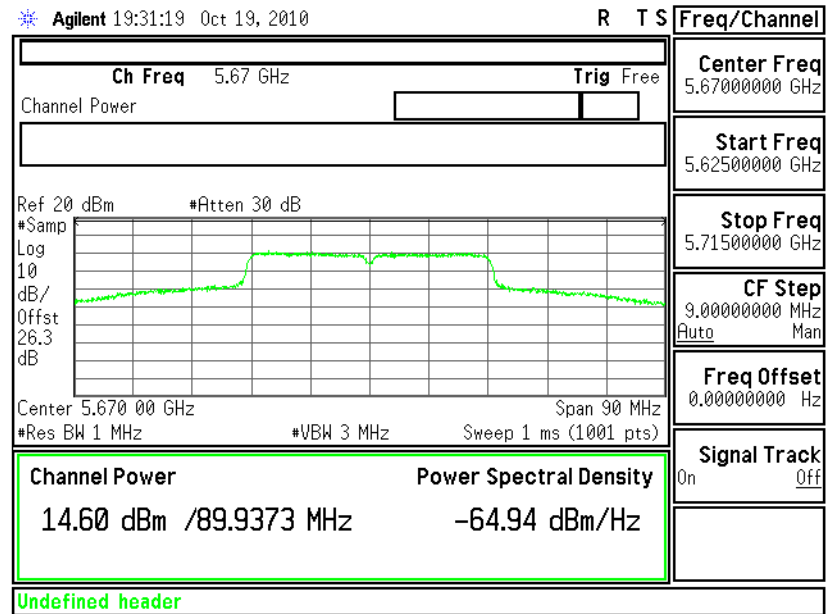




Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 2

Agilent 19:31:19 Oct 19, 2010

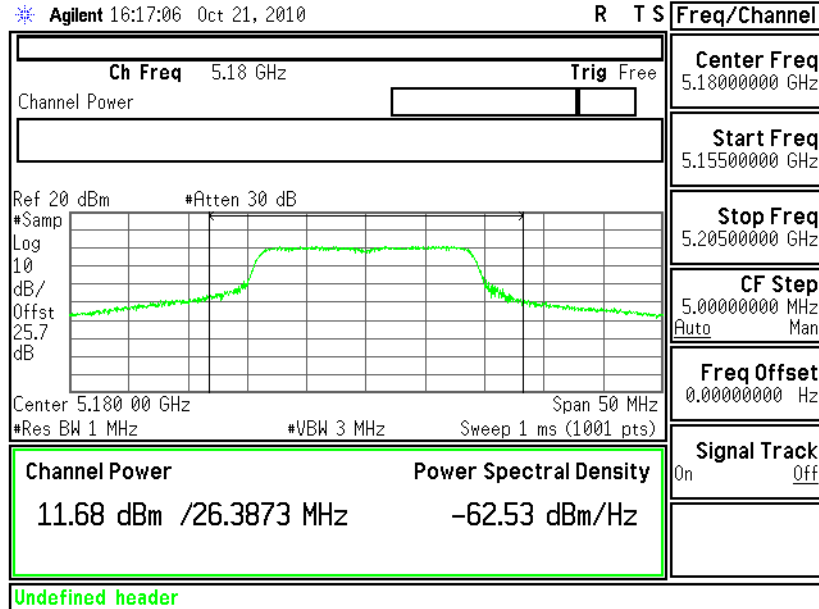
R T S



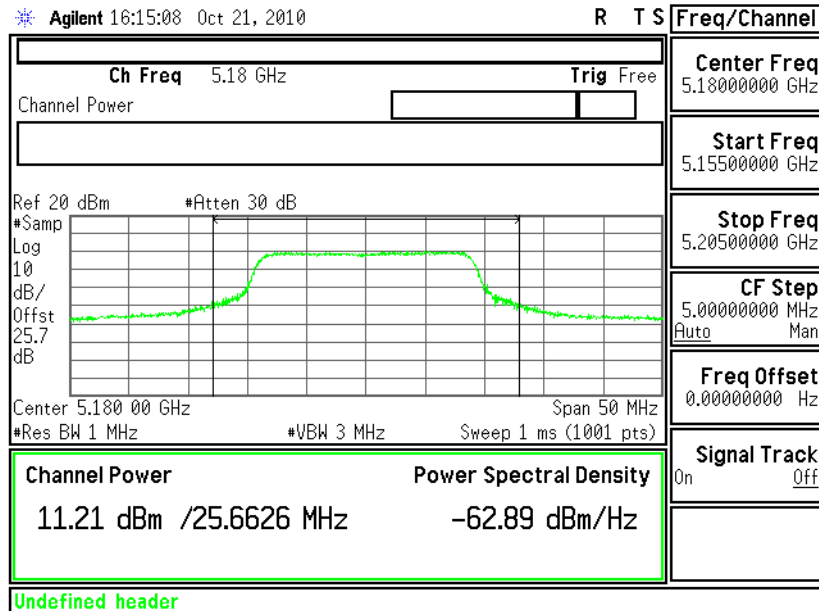


<Beam-Forming On: 2x3>

Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 0

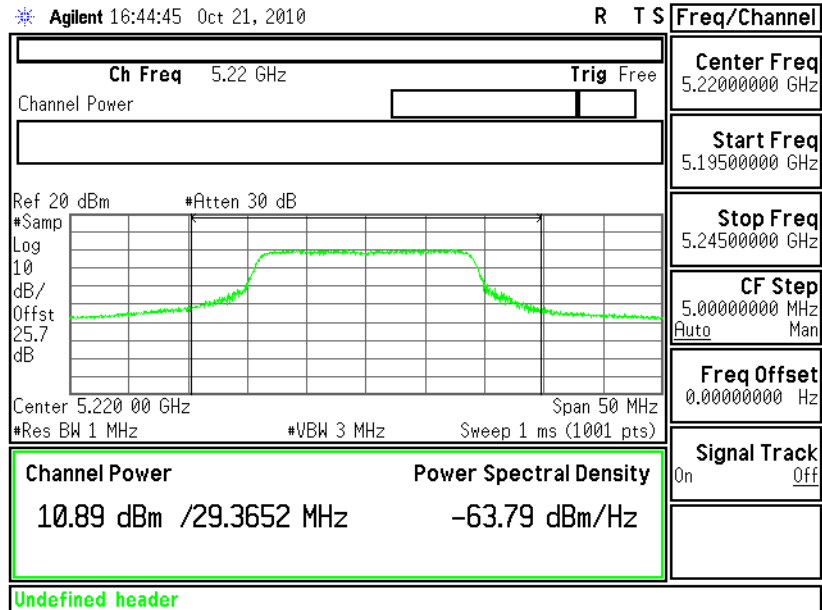


Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 1

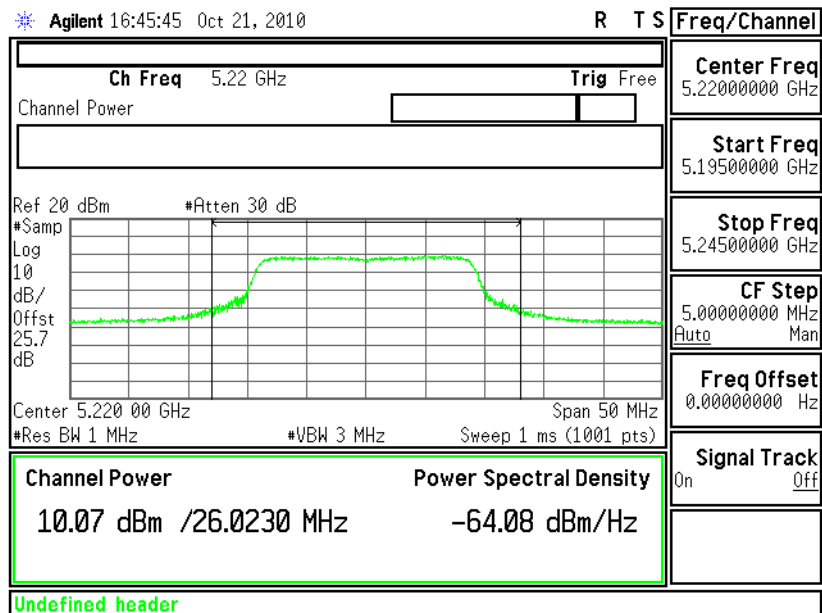




Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 0

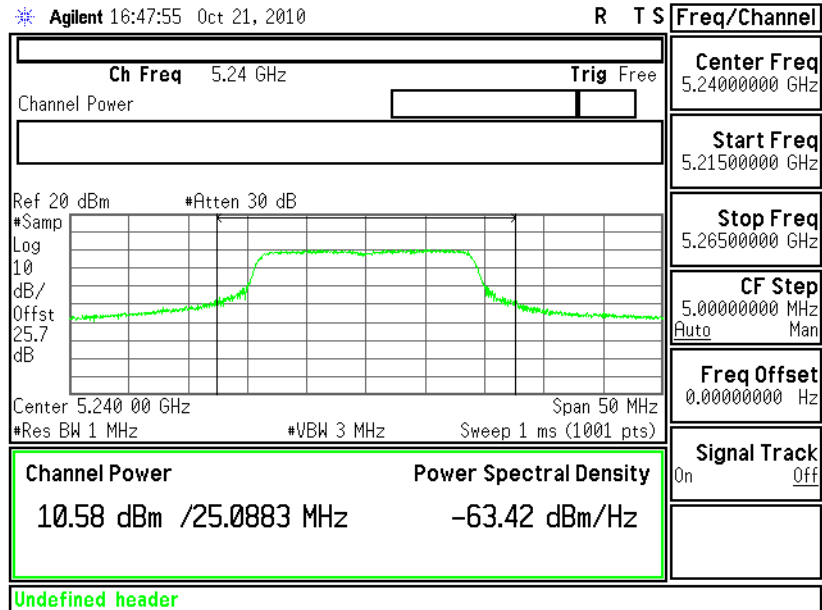


Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 1

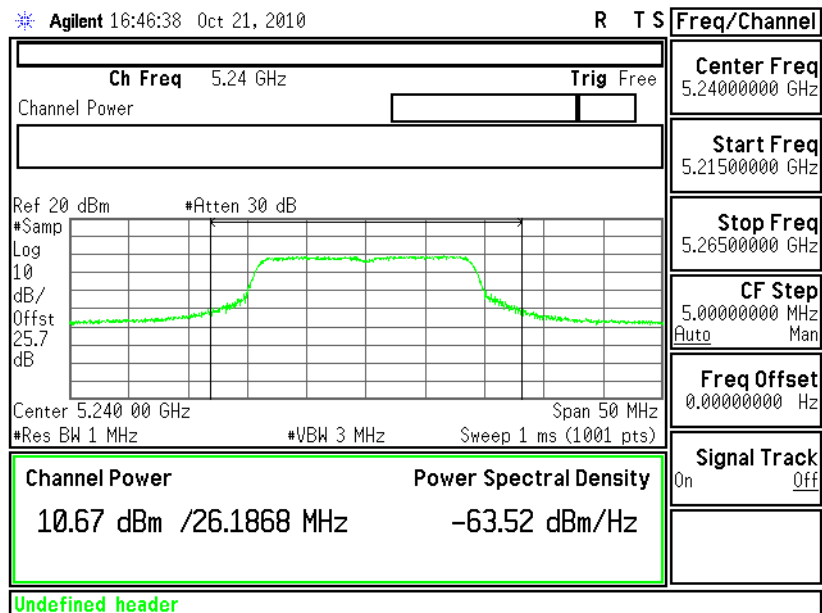




Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 0

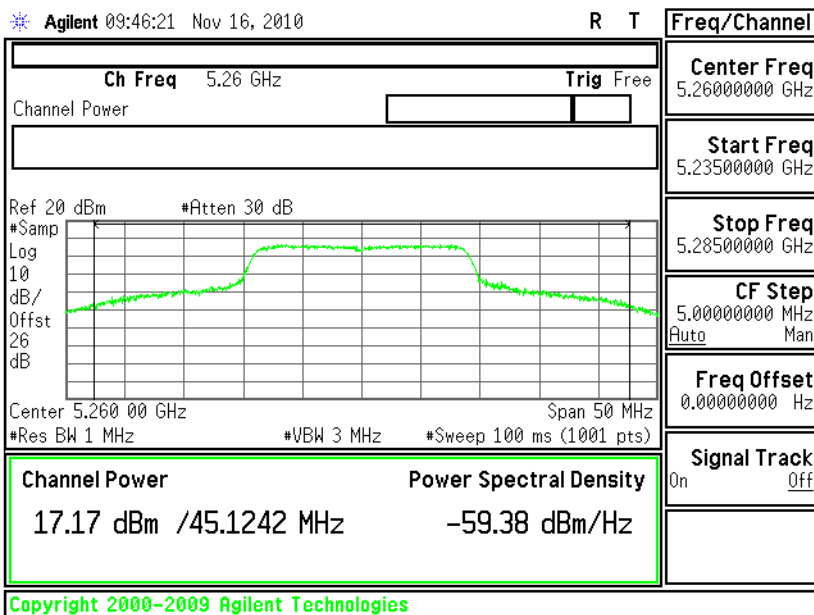


Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 1

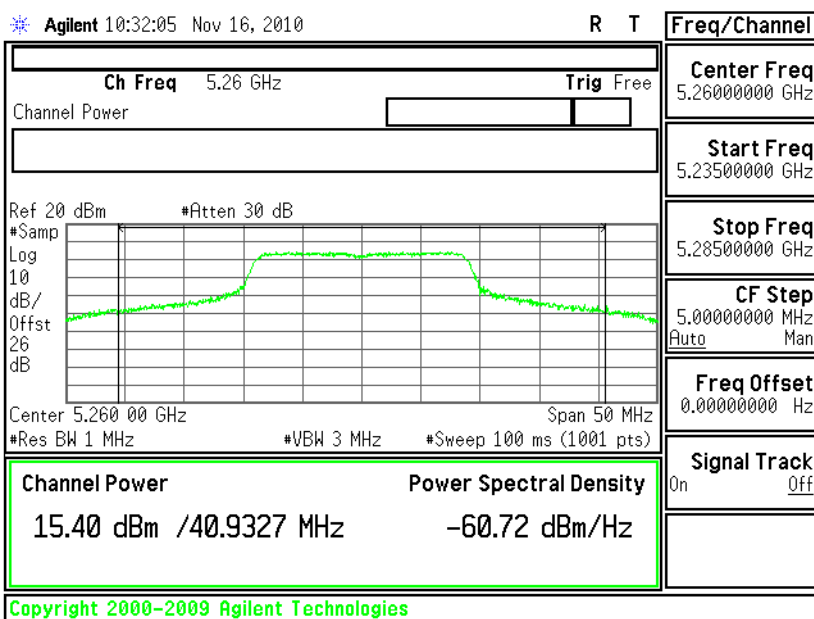




Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 1

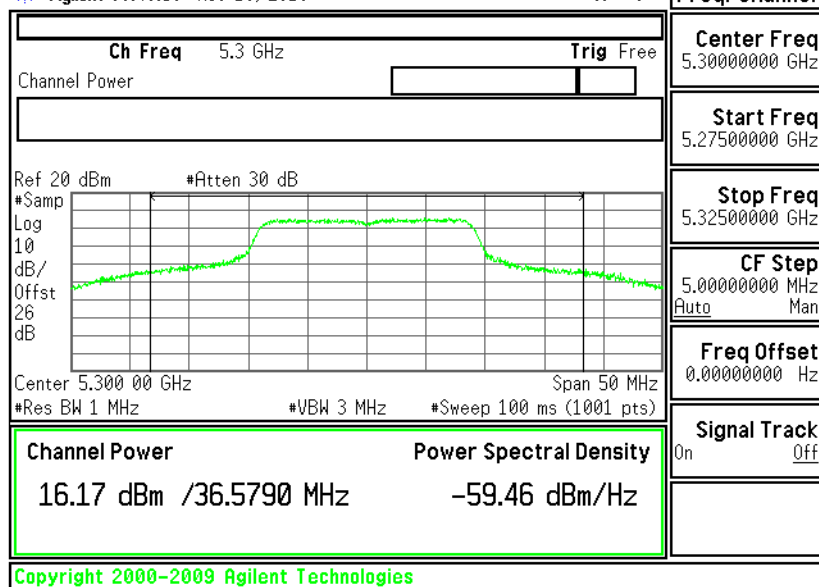




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 0

Agilent 09:48:50 Nov 16, 2010

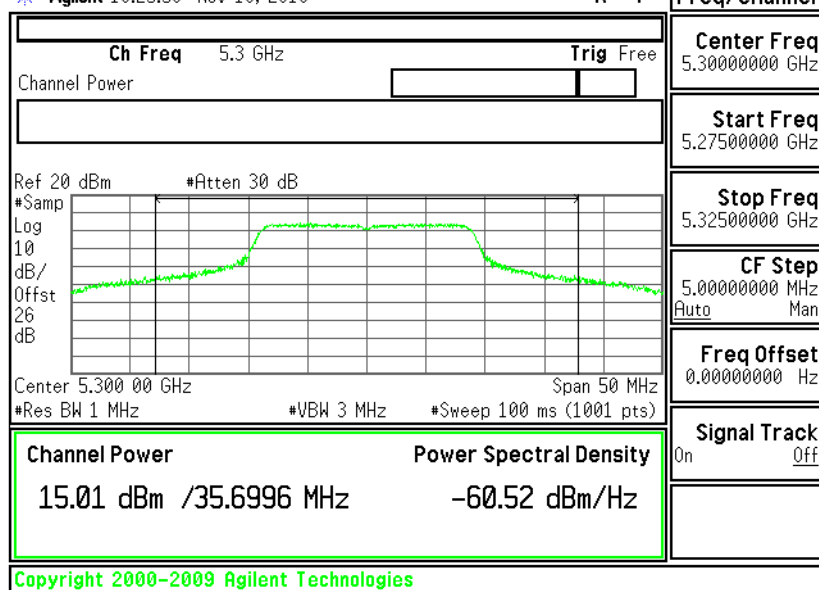
R T



Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 1

Agilent 10:25:56 Nov 16, 2010

R T

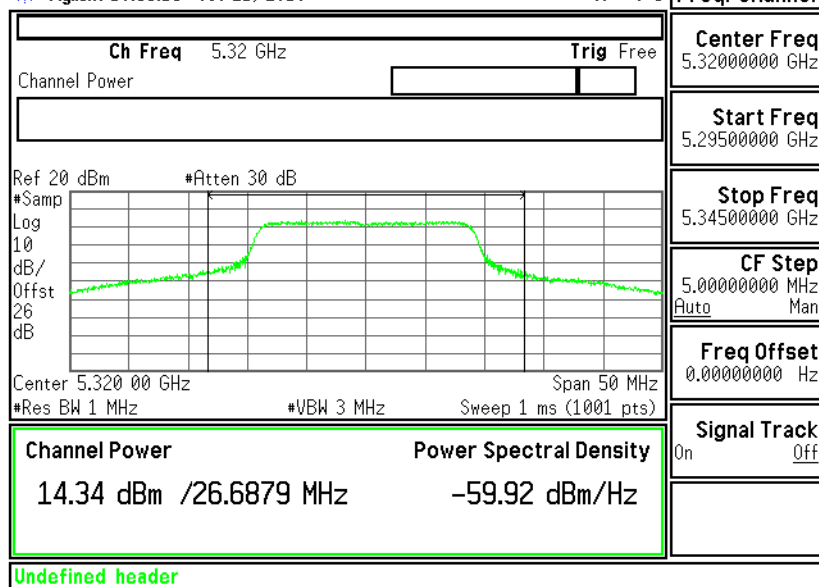




Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 0

Agilent 16:55:15 Oct 21, 2010

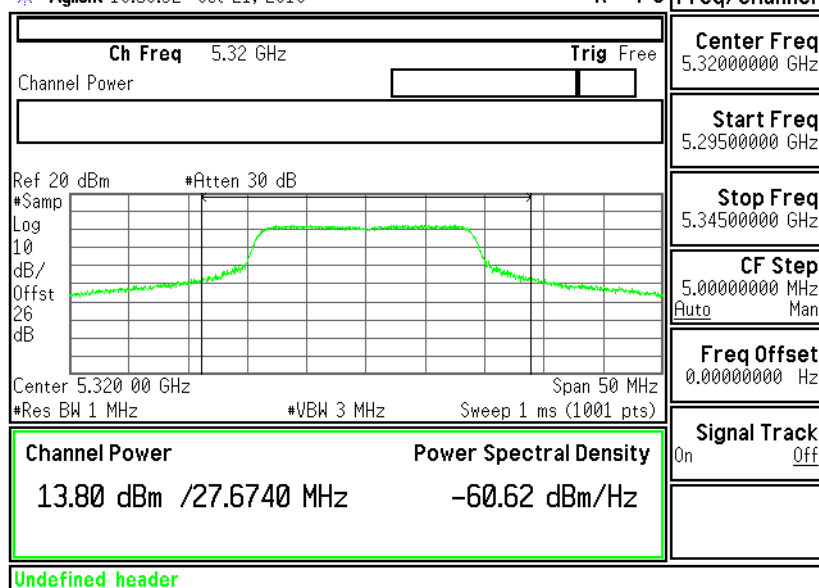
R T S



Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 1

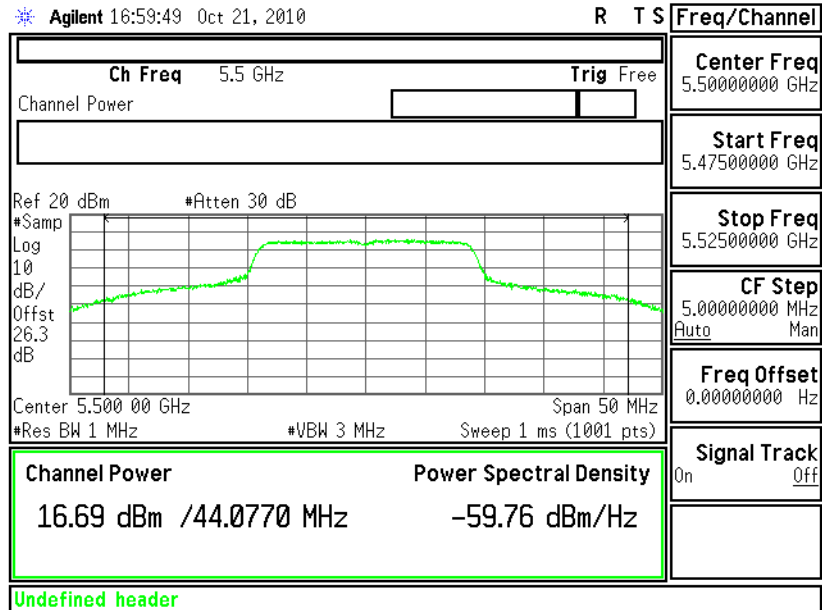
Agilent 16:56:32 Oct 21, 2010

R T S

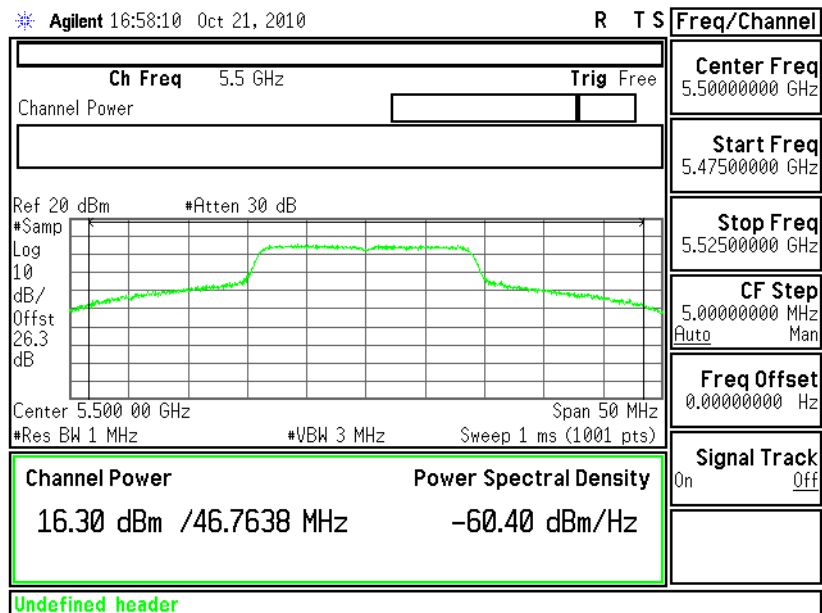




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 0

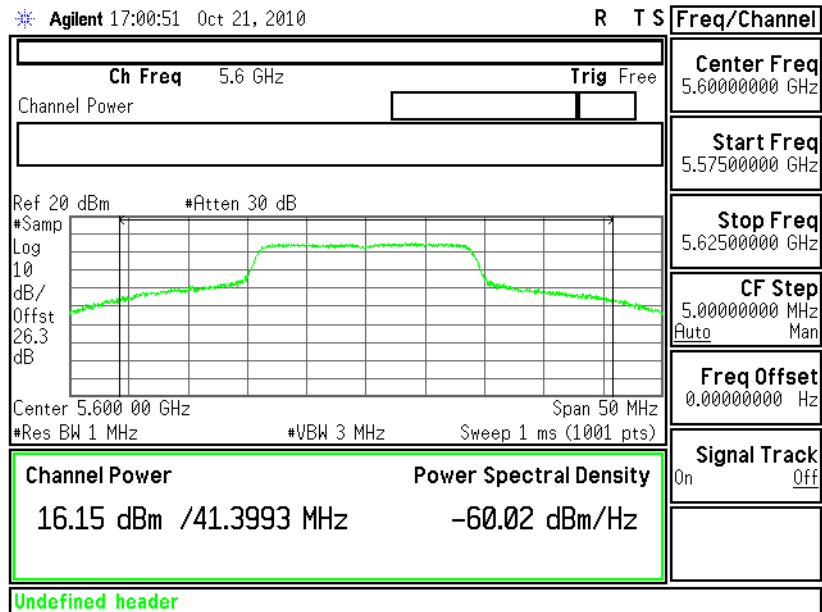


Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 1

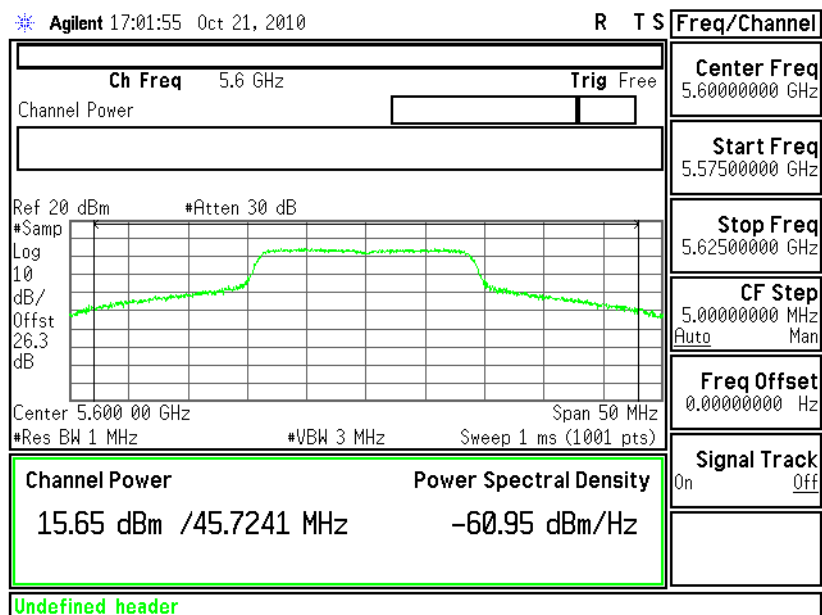




Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 1

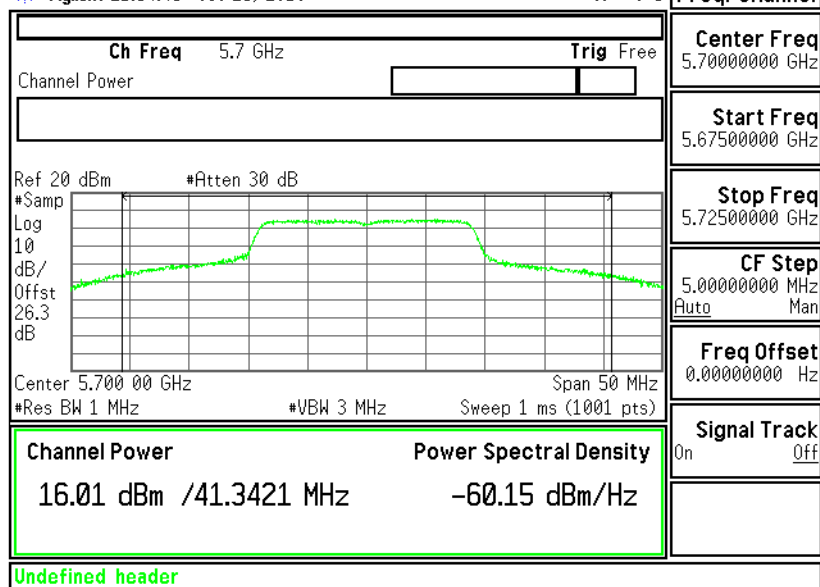




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 0

Agilent 21:54:45 Oct 25, 2010

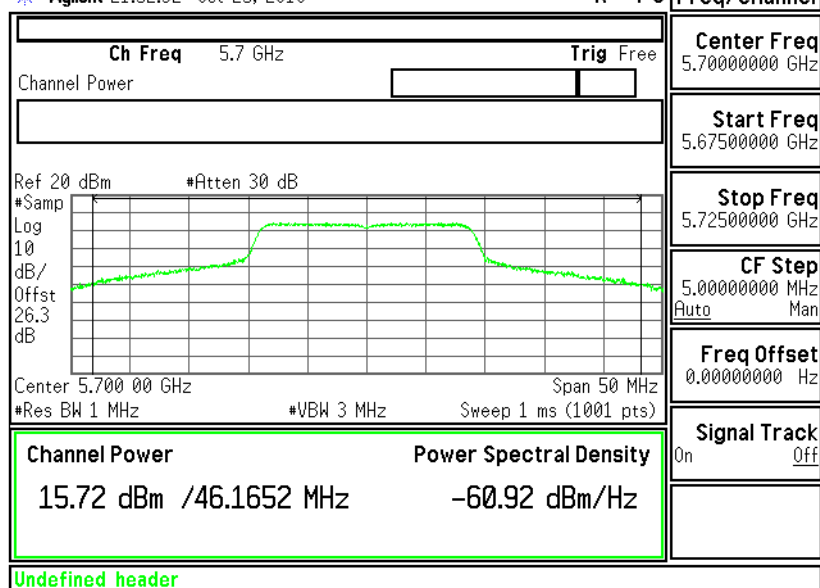
R T S



Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 1

Agilent 21:52:32 Oct 25, 2010

R T S

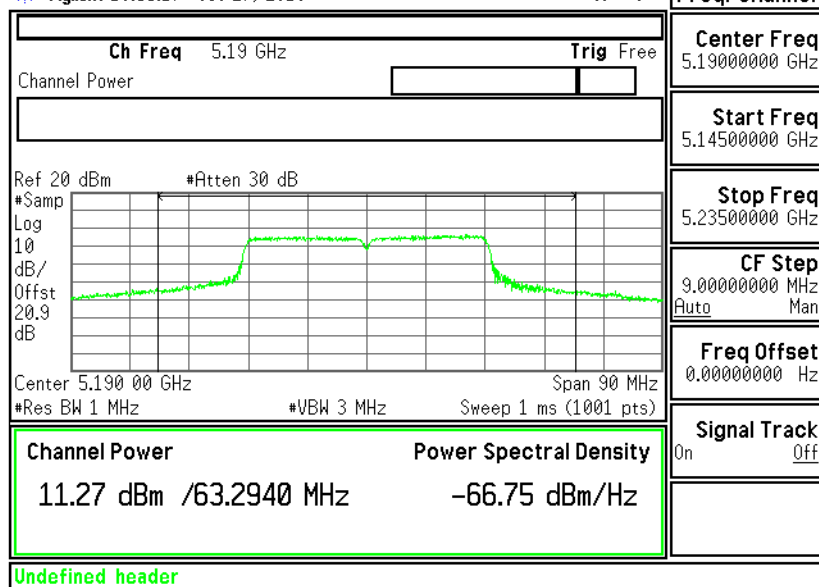




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 0

Agilent 16:55:17 Oct 27, 2010

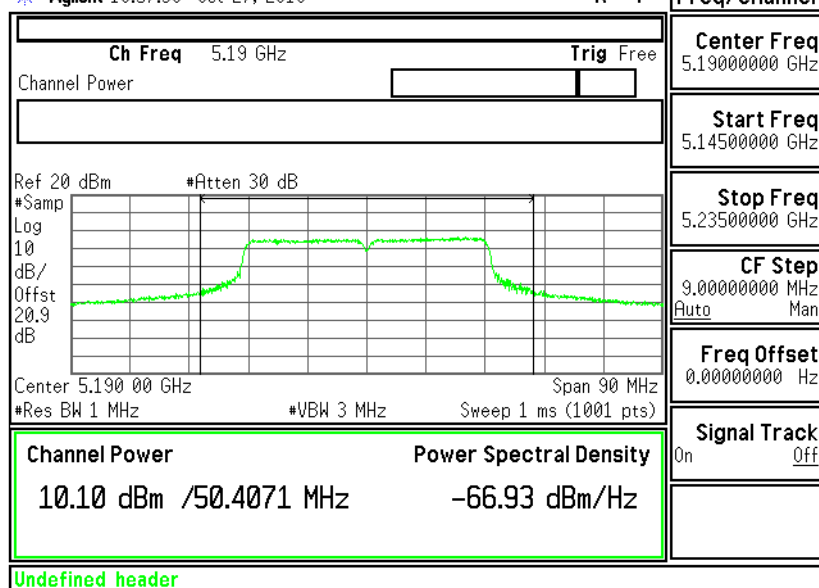
R T



Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 1

Agilent 16:57:30 Oct 27, 2010

R T

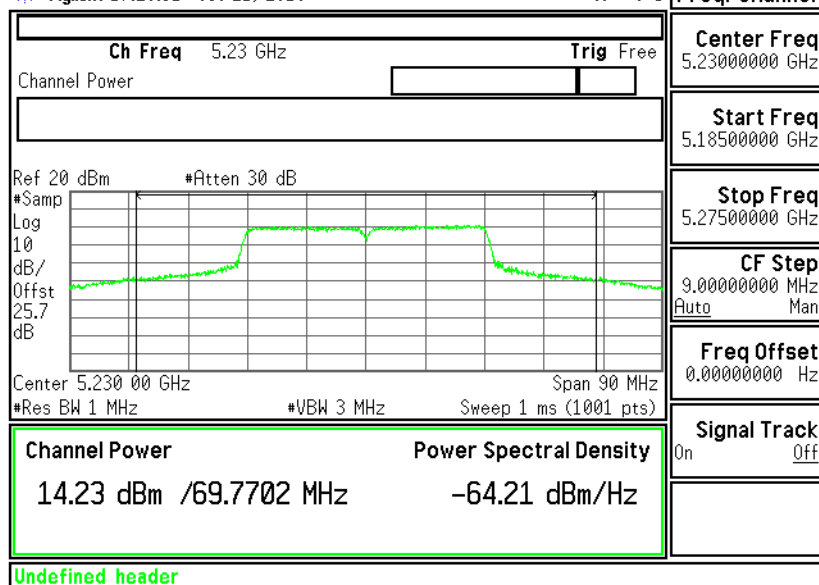




Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 0

Agilent 17:20:31 Oct 21, 2010

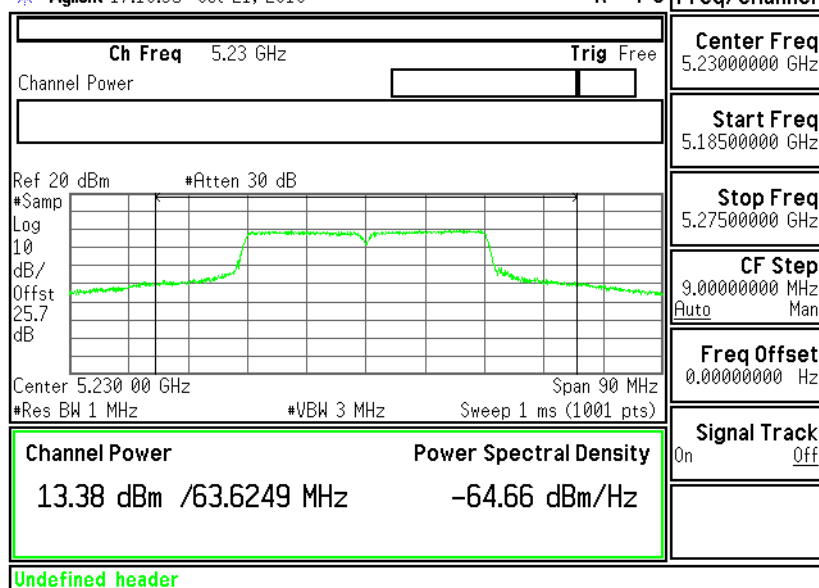
R T S



Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 1

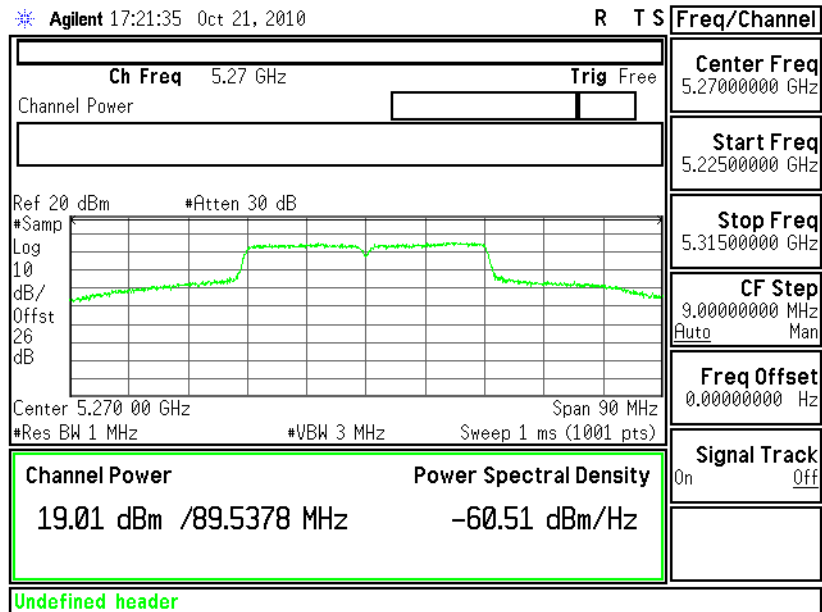
Agilent 17:19:35 Oct 21, 2010

R T S

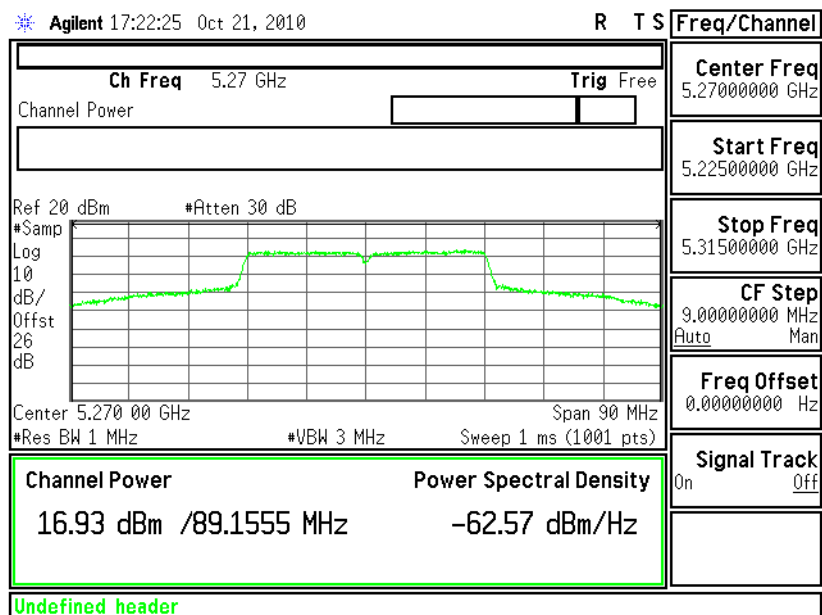




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 0

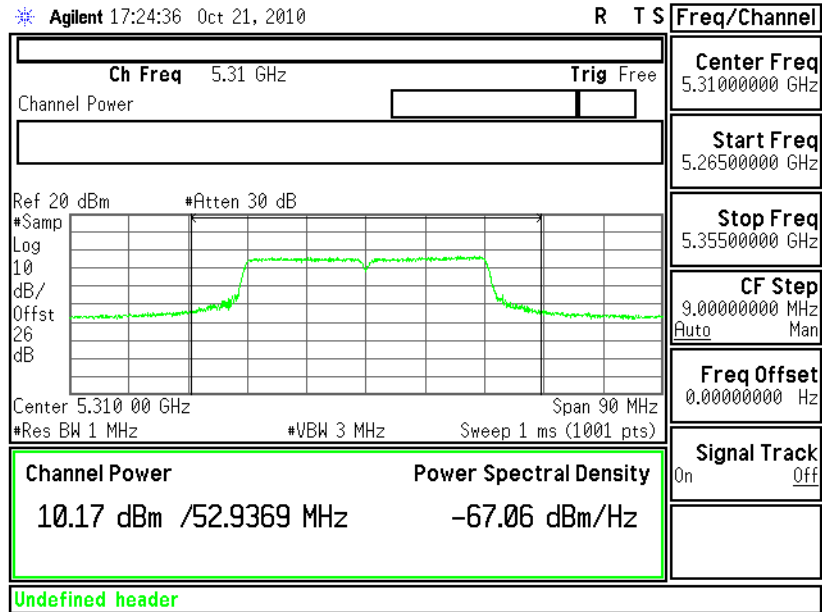


Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 1

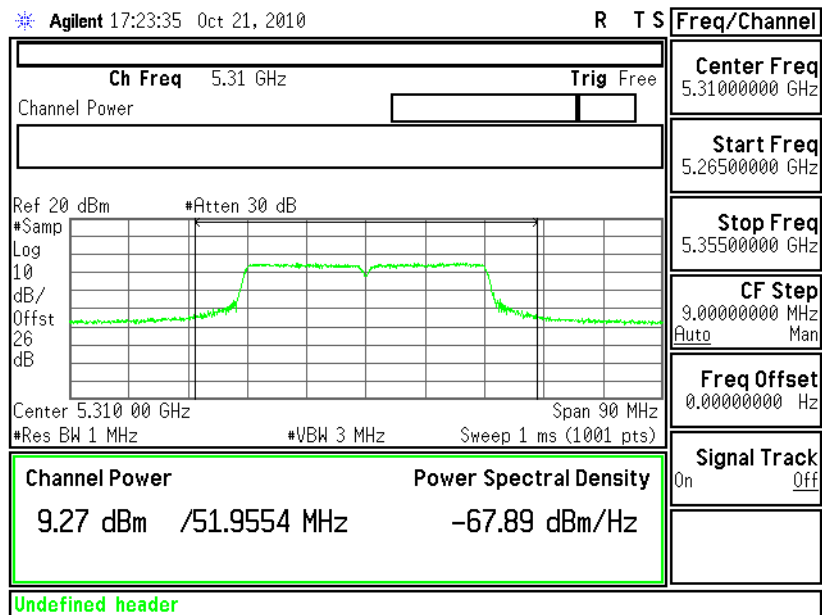




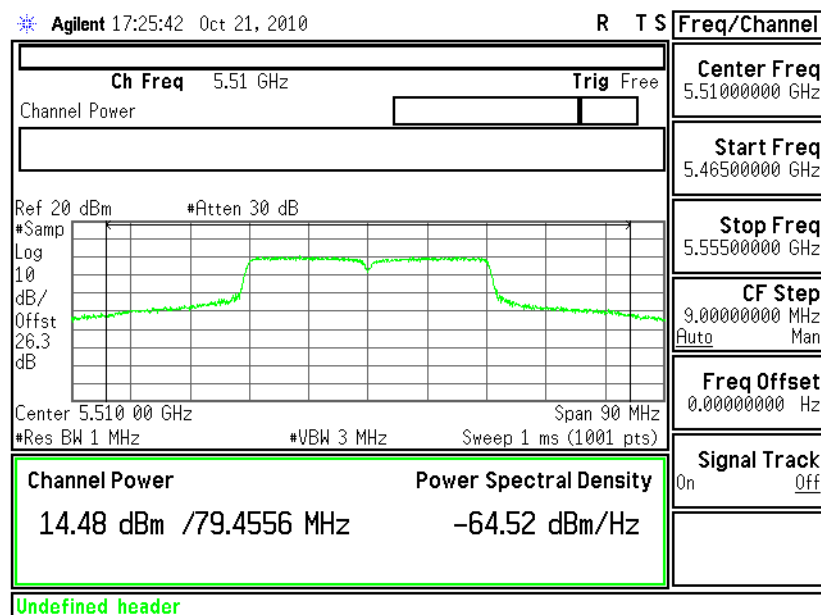
Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 0



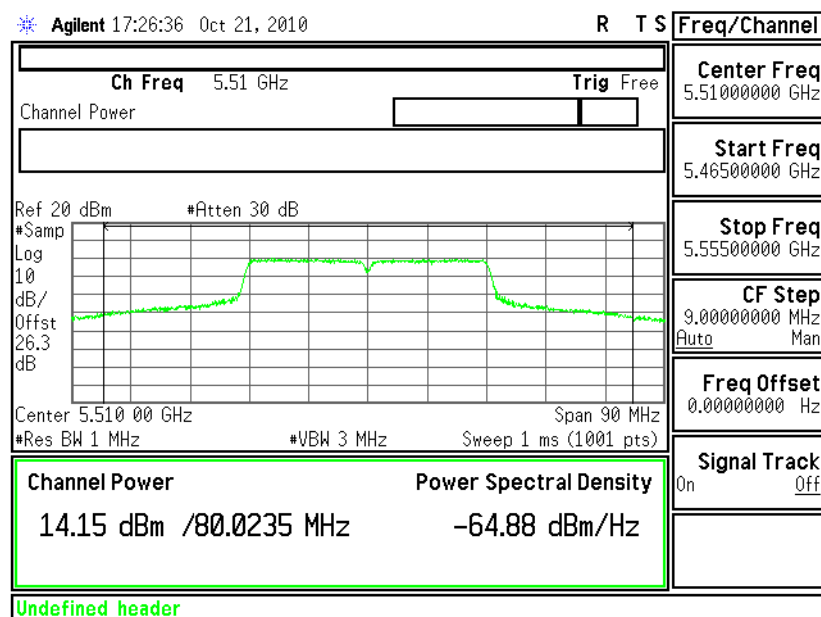
Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 1



Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 0

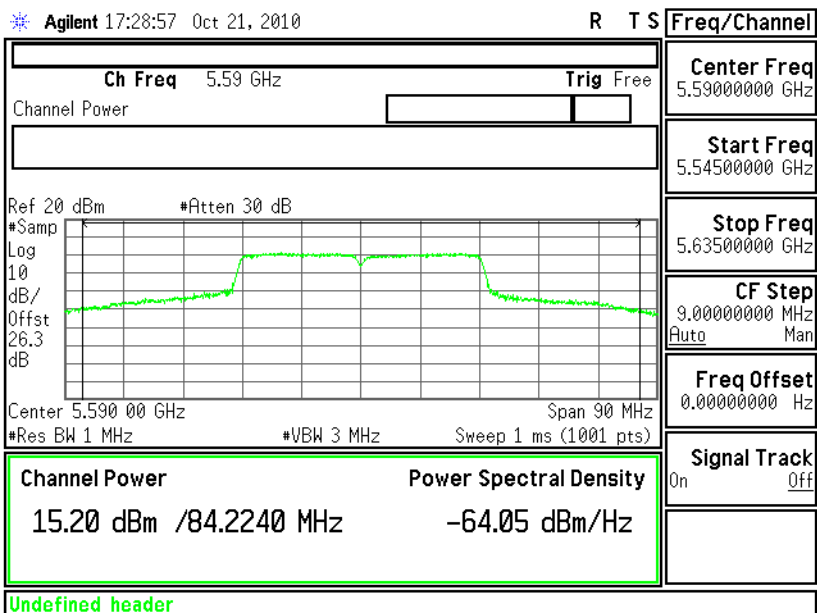


Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 1

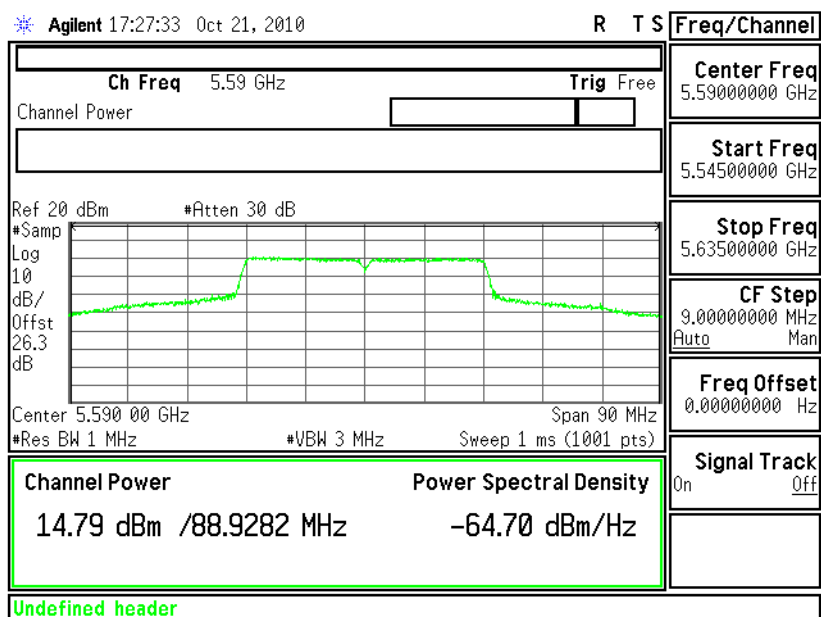




Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 1

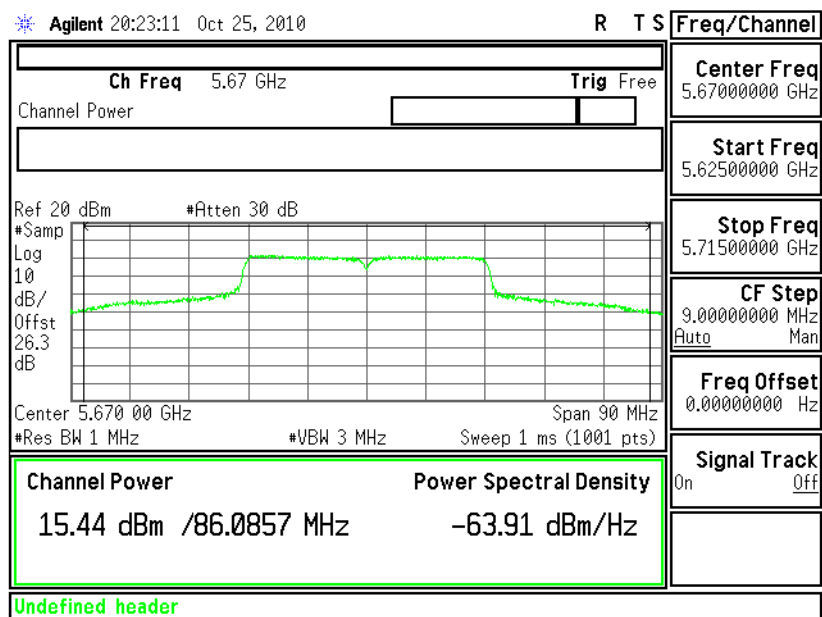




Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 0

Agilent 20:23:11 Oct 25, 2010

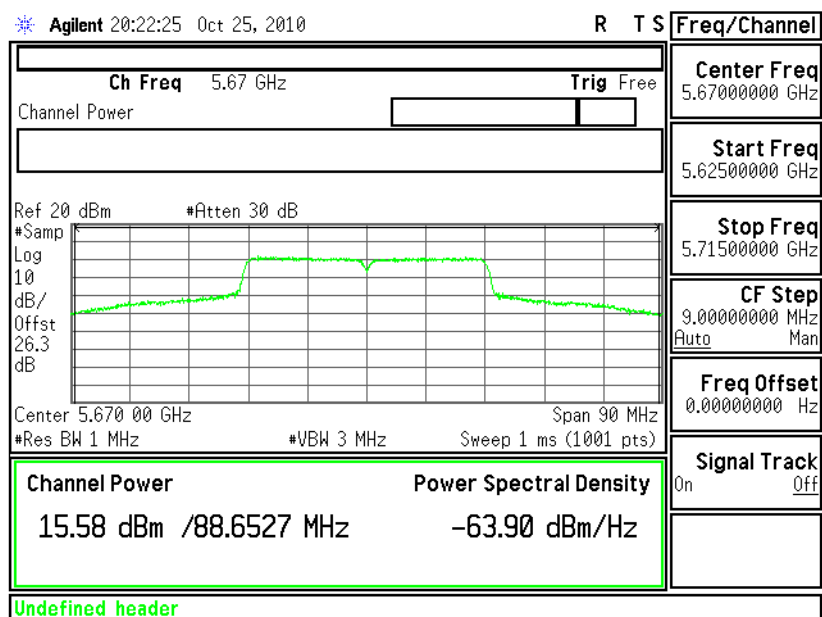
R T S



Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 1

Agilent 20:22:25 Oct 25, 2010

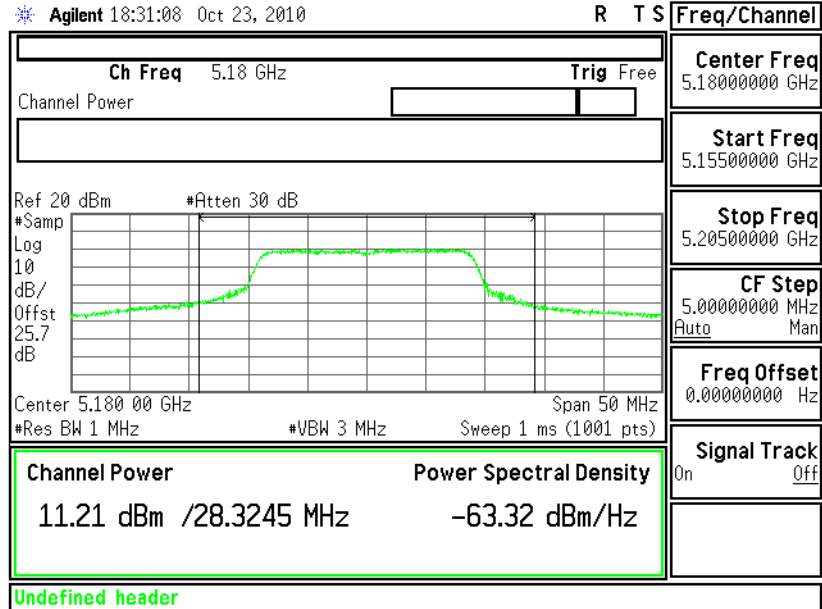
R T S



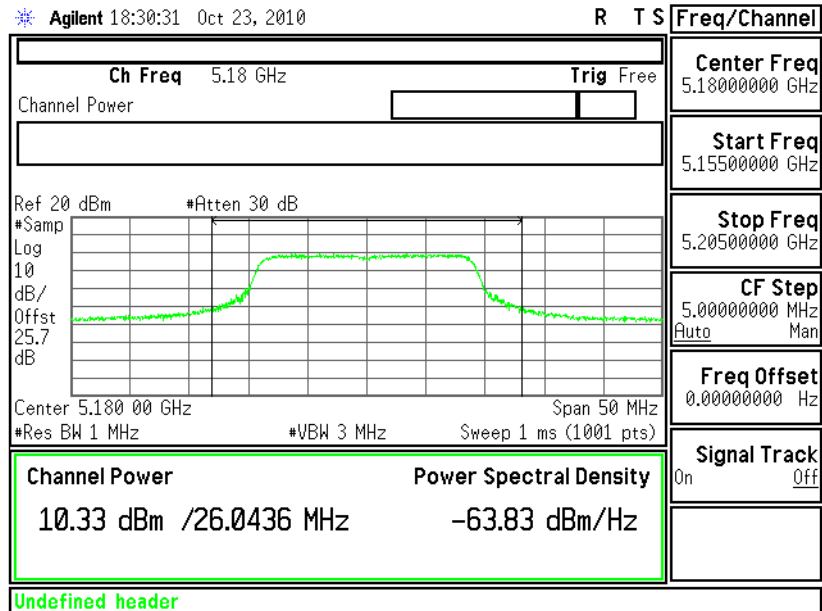


<Beam-Forming Off: 3x3>

Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 1

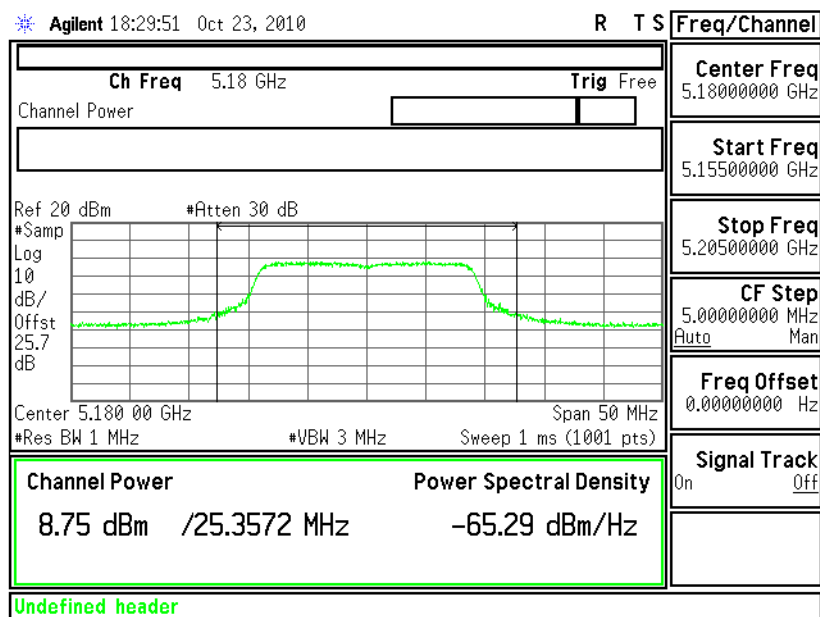




Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 2

Agilent 18:29:51 Oct 23, 2010

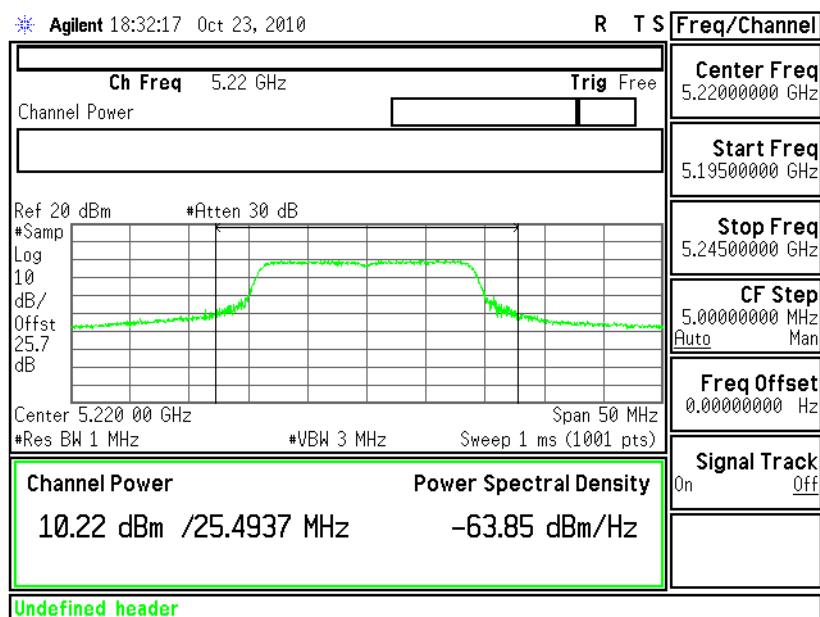
R T S



Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 0

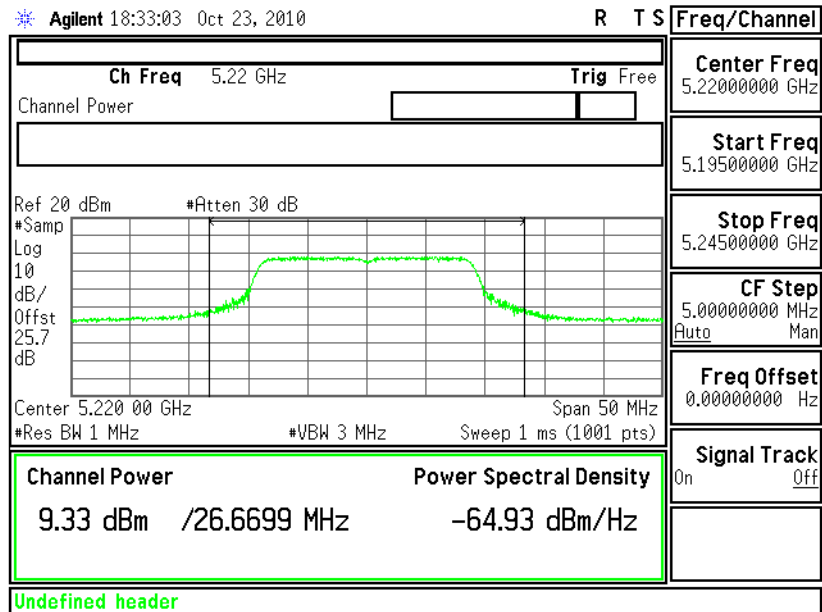
Agilent 18:32:17 Oct 23, 2010

R T S

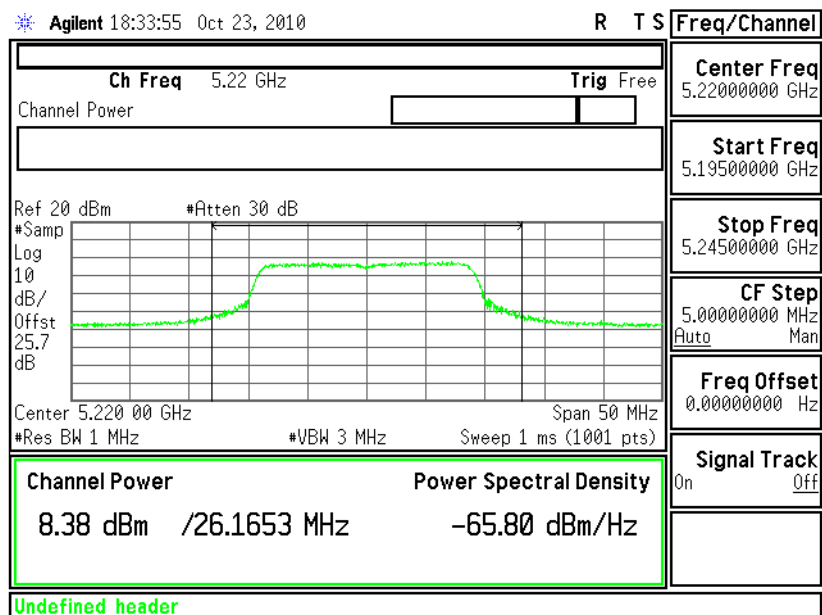




Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 1

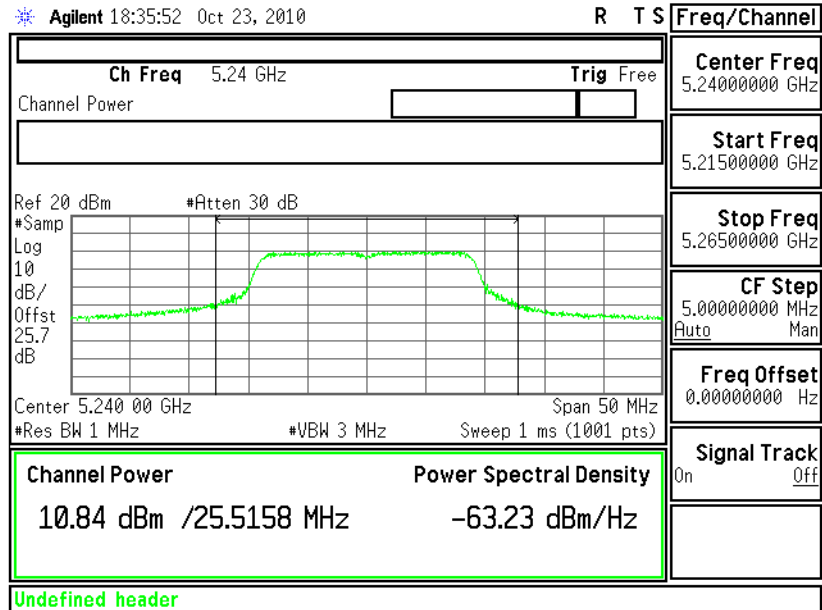


Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 2

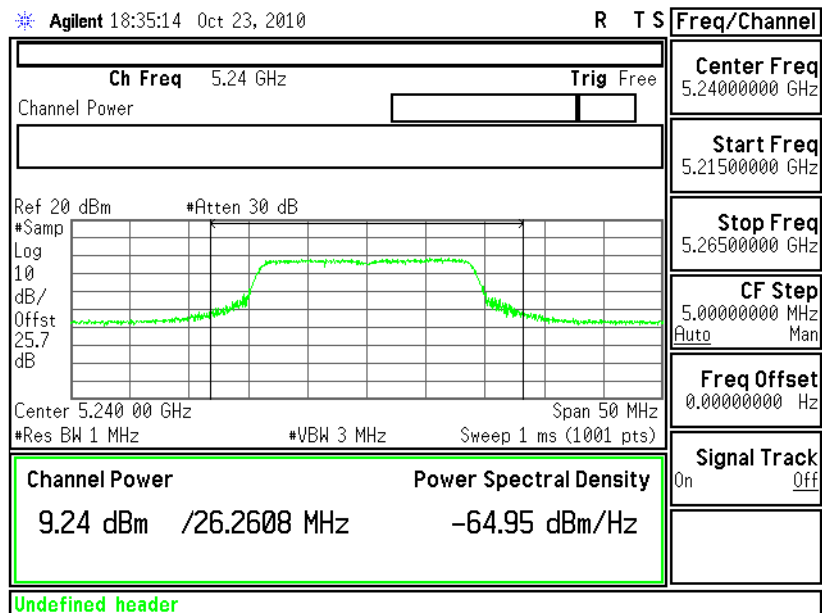




Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 0

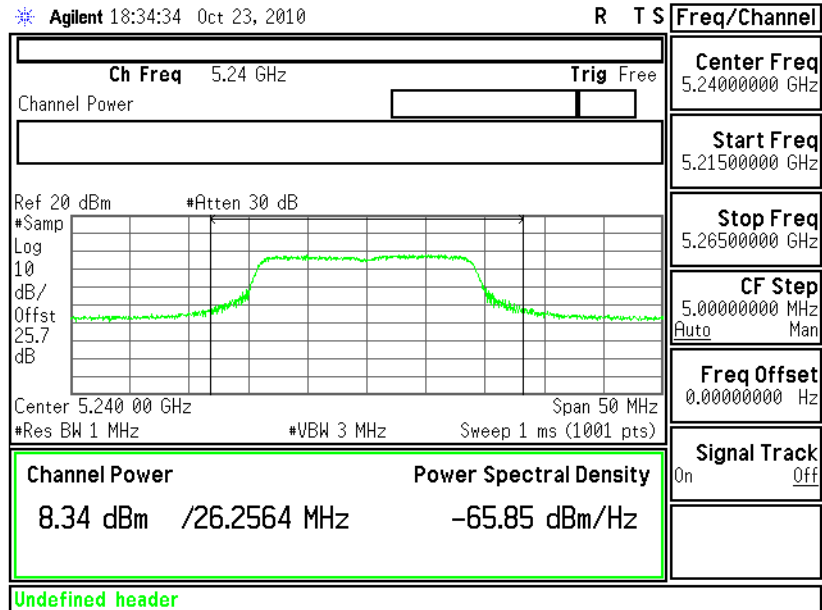


Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 1

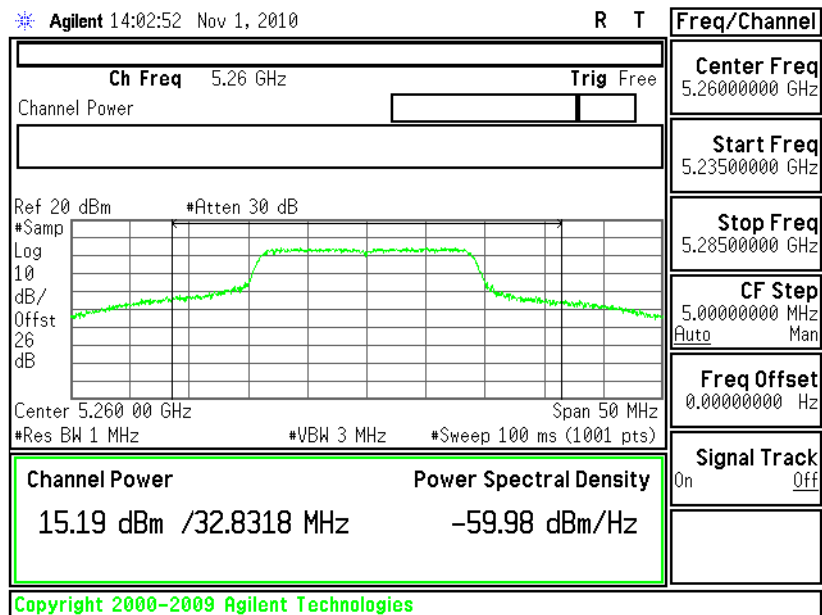




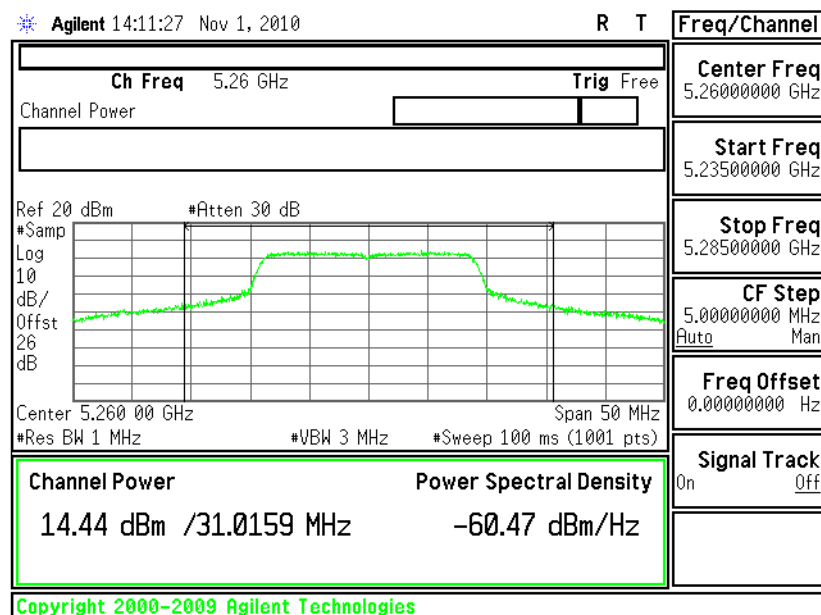
Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 2



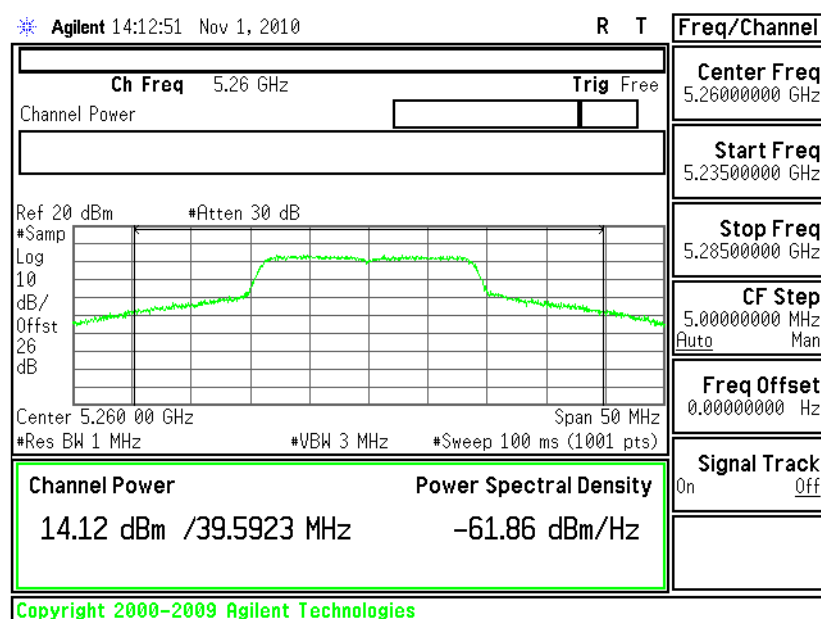
Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 1

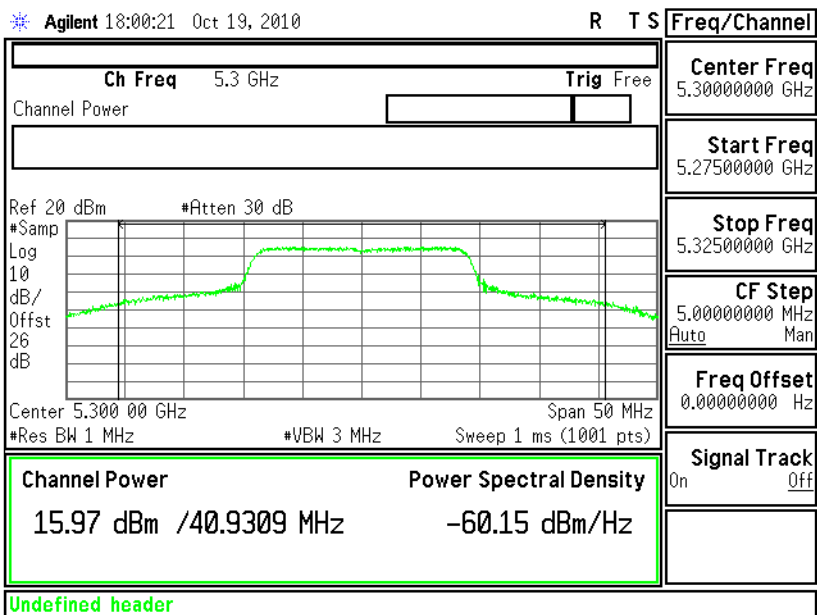


Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 2

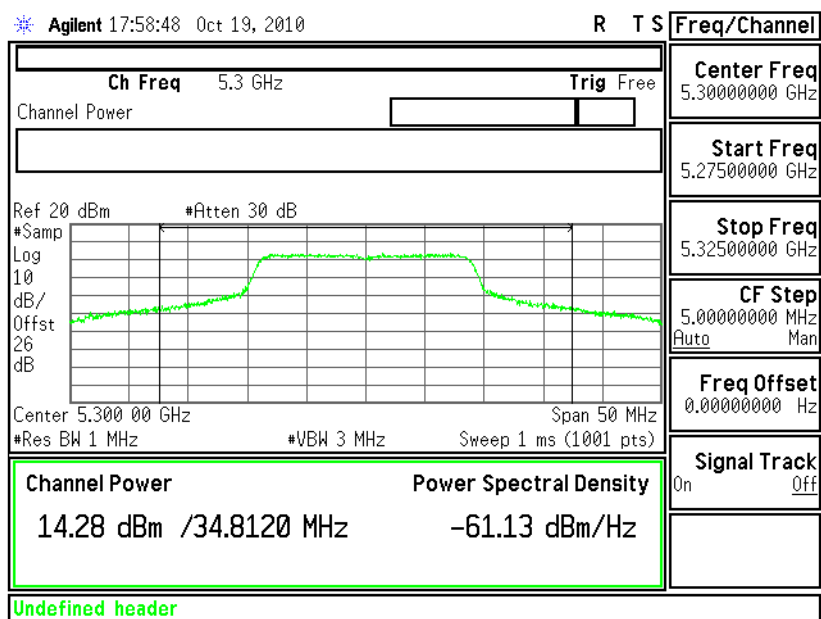




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 0

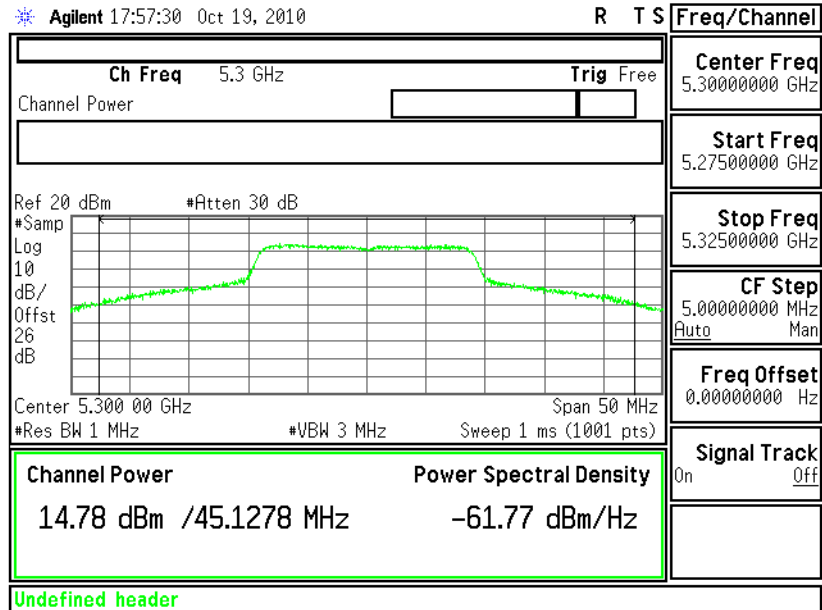


Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 1

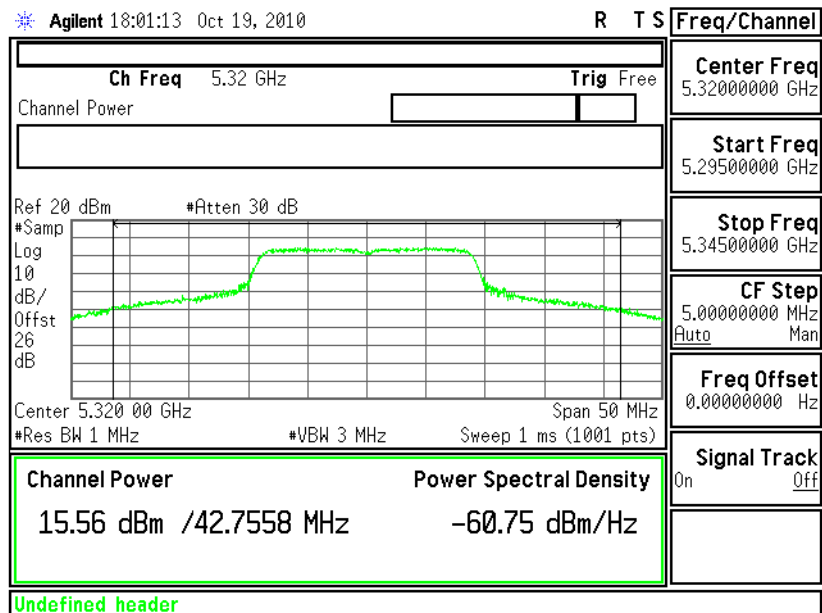




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 2

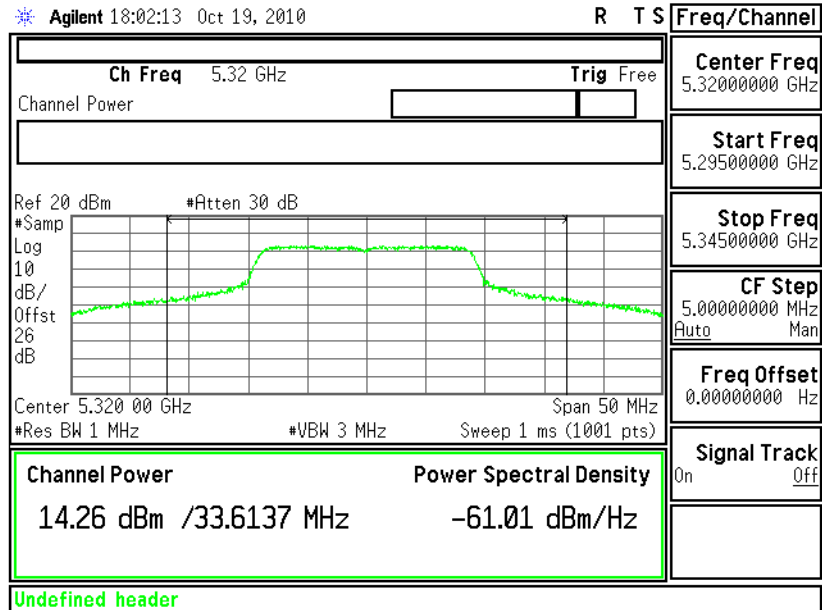


Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 0

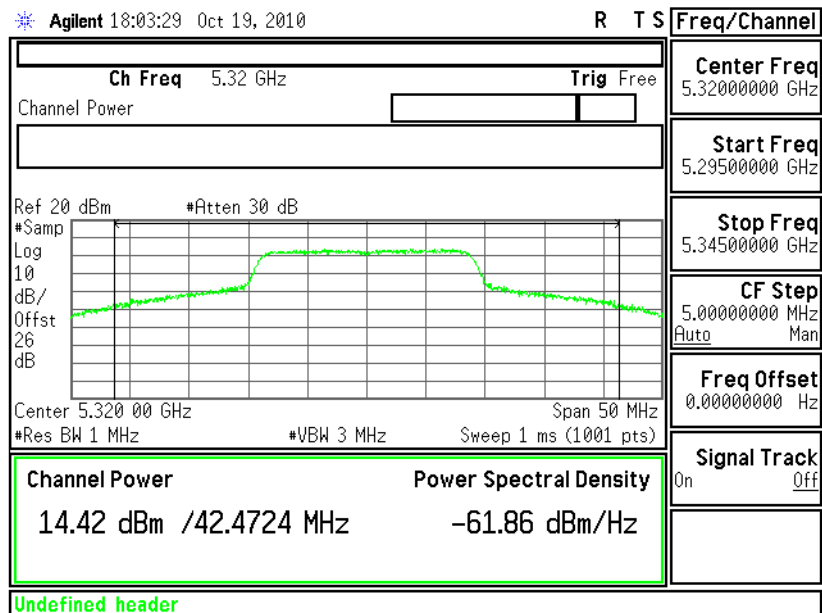




Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 1



Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 2

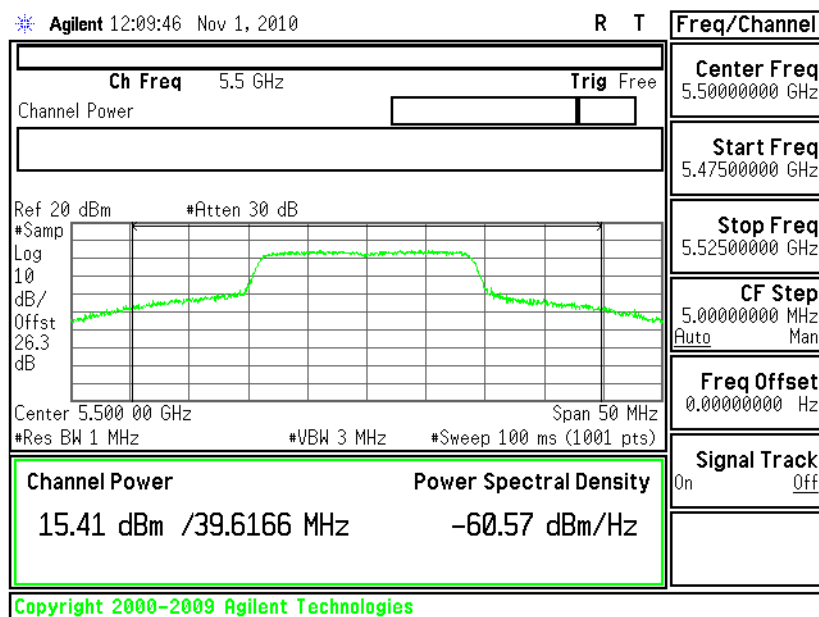




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 0

Agilent 12:09:46 Nov 1, 2010

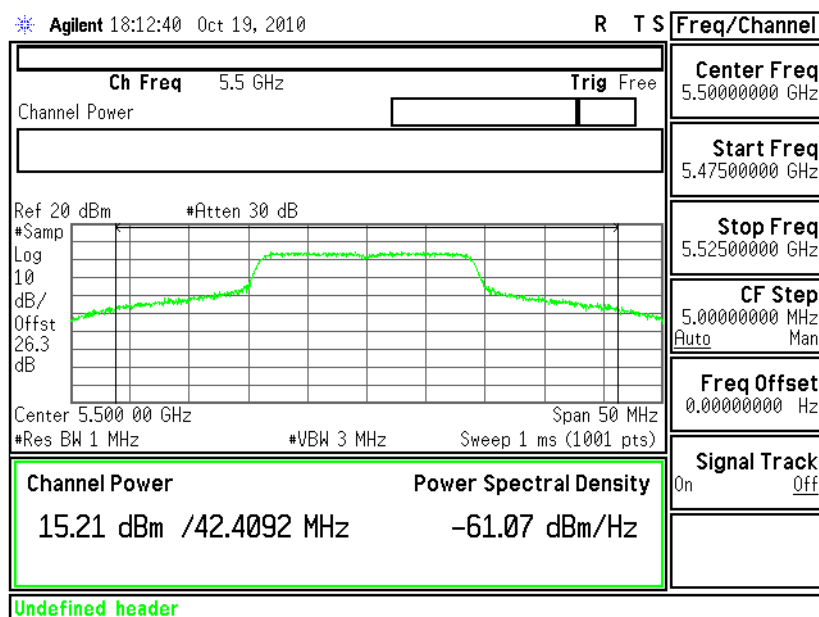
R T



Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 1

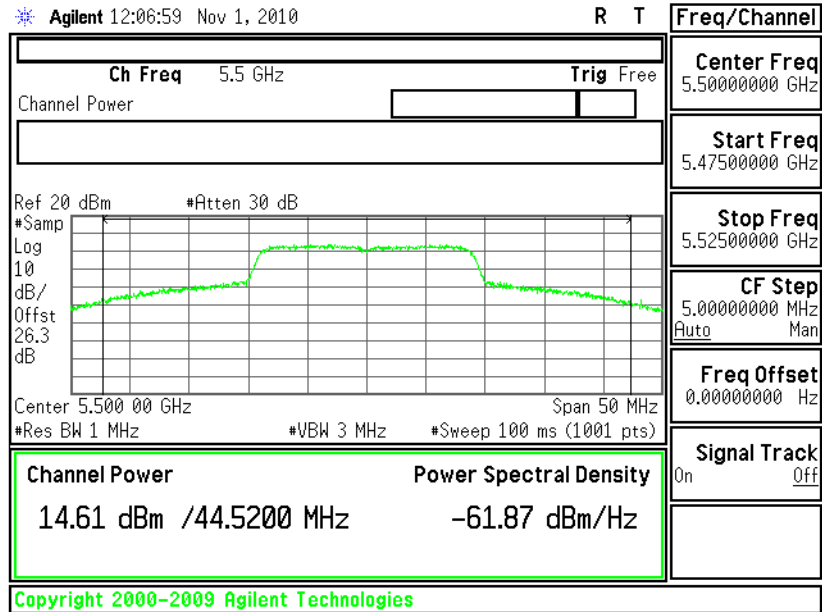
Agilent 18:12:40 Oct 19, 2010

R T S

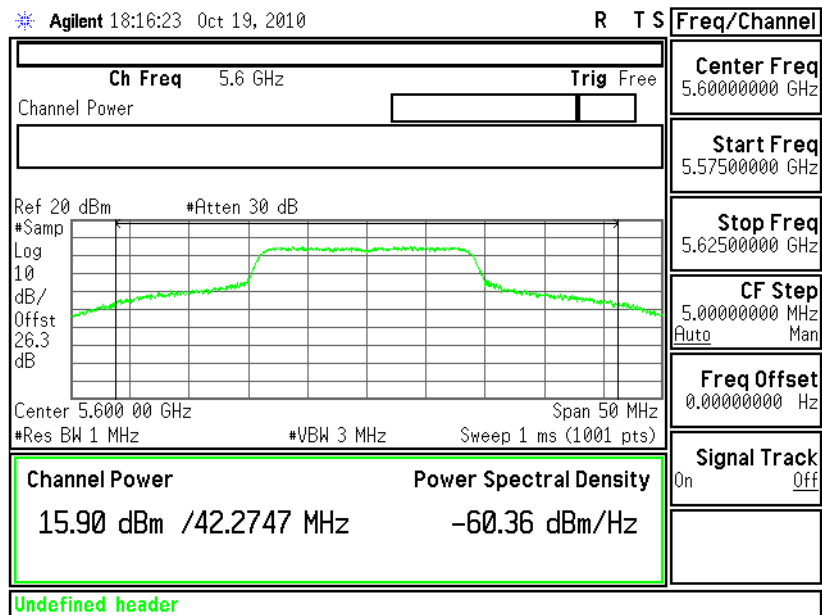




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 2

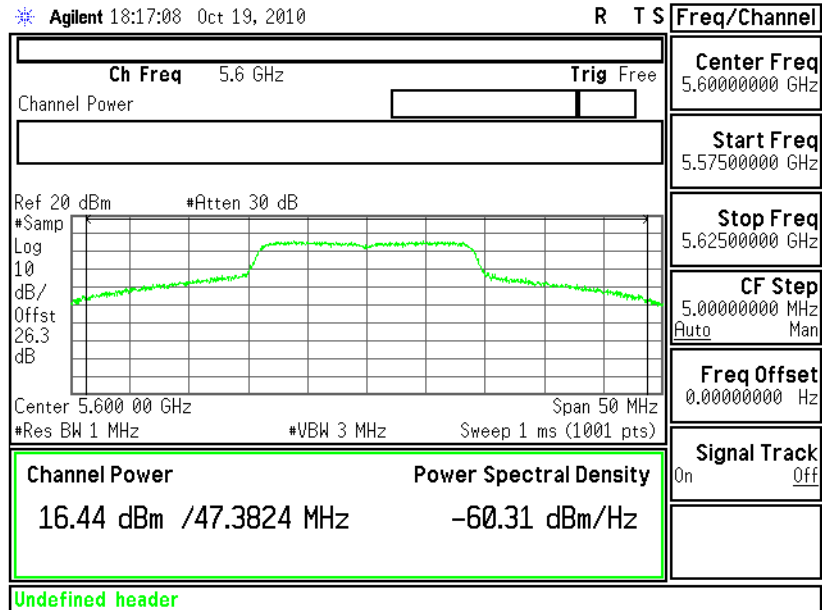


Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 0

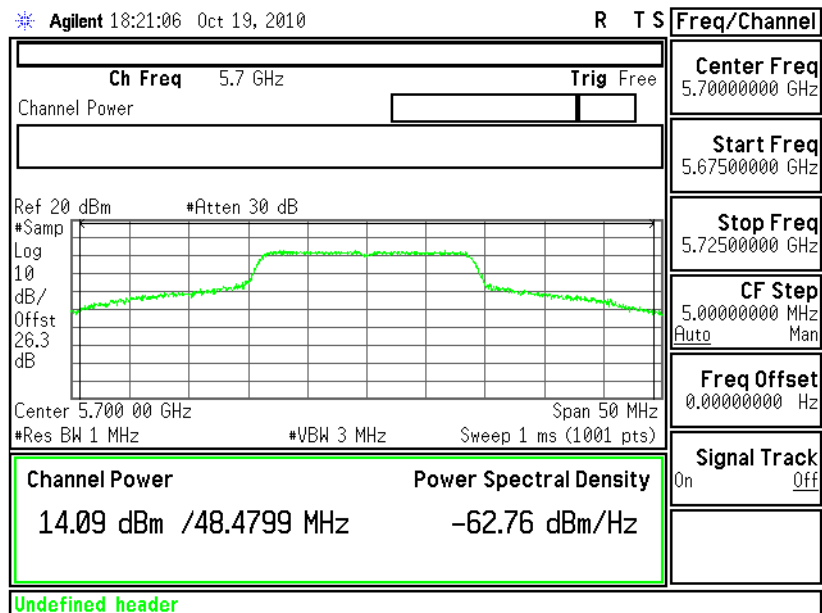




Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 1



Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 2

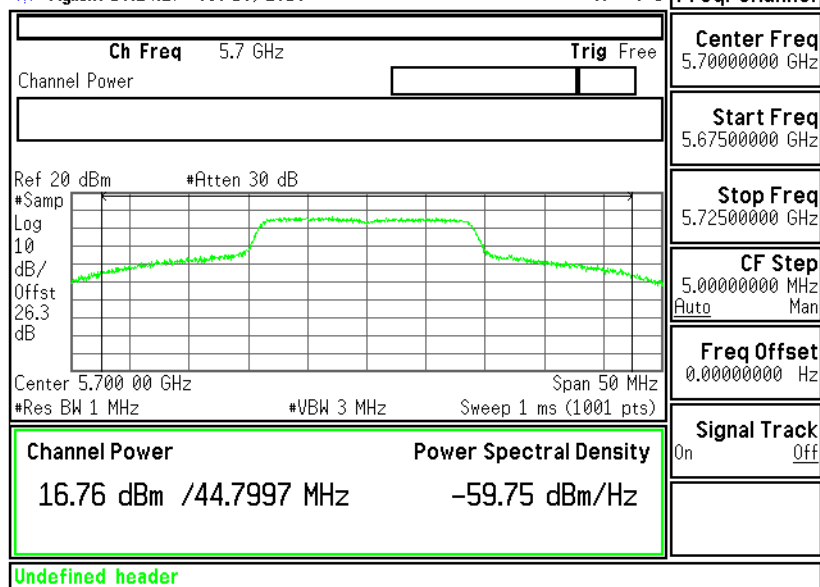




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 0

Agilent 18:24:27 Oct 19, 2010

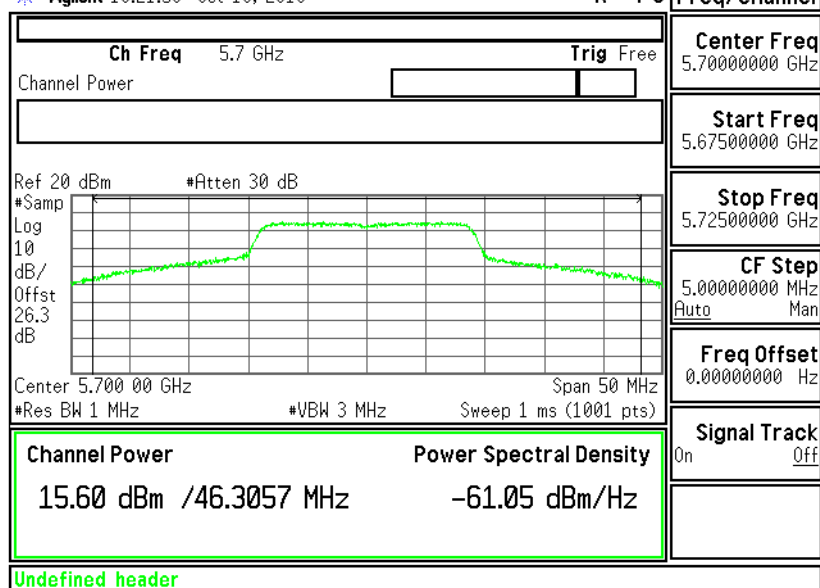
R T S



Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 1

Agilent 18:21:56 Oct 19, 2010

R T S

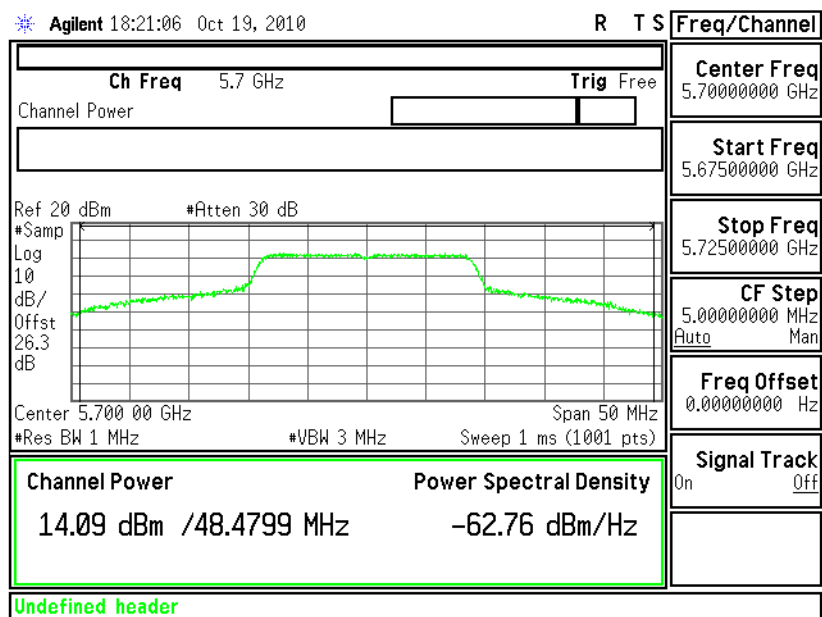




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 2

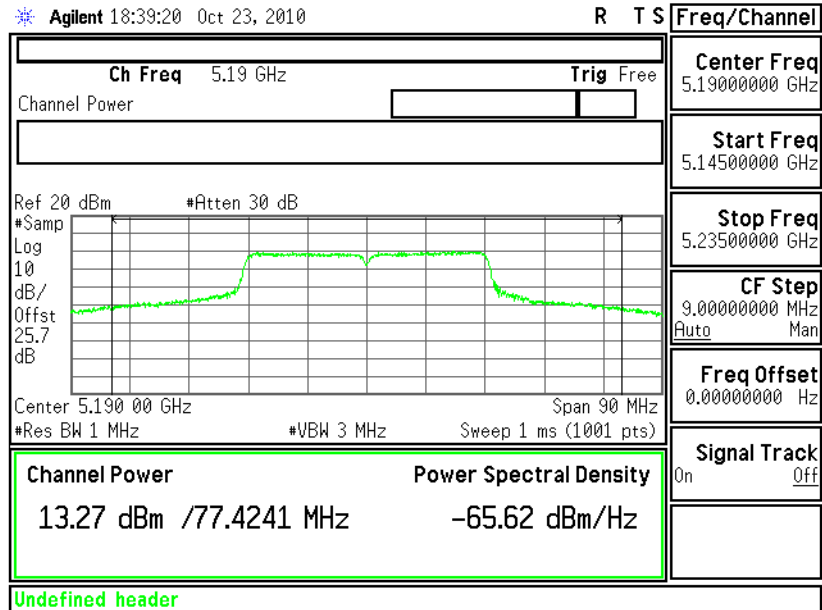
Agilent 18:21:06 Oct 19, 2010

R T S

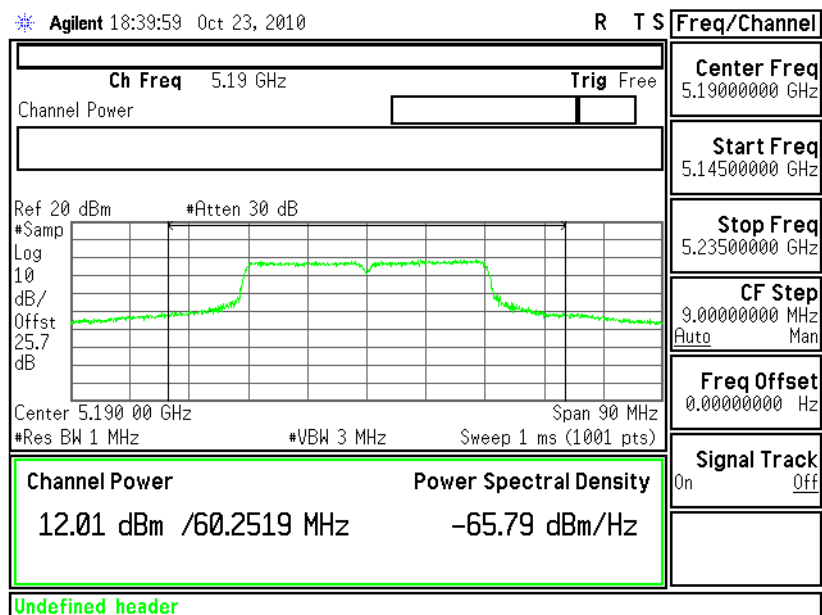




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 1

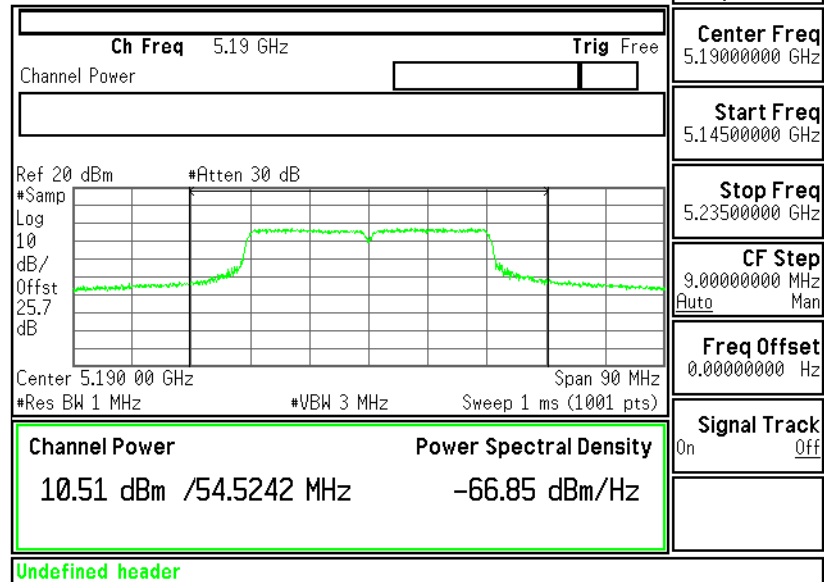




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 2

Agilent 18:40:57 Oct 23, 2010

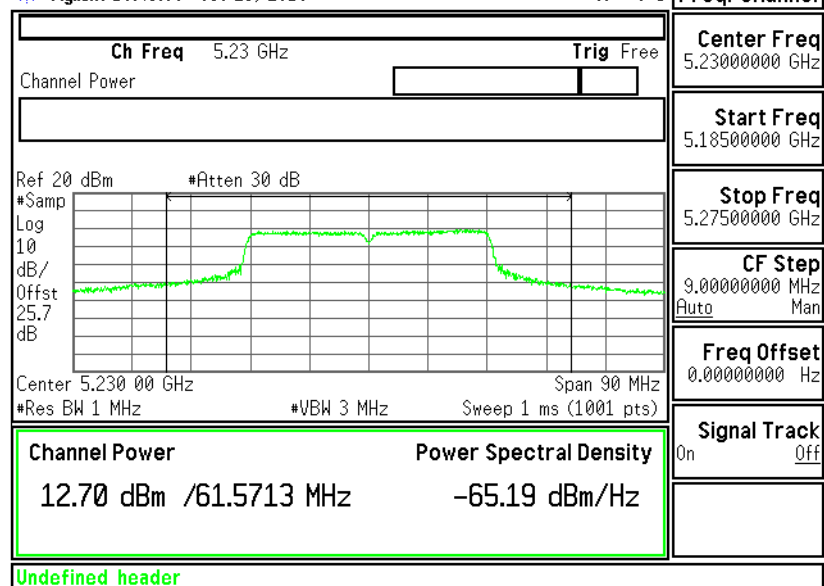
R T S



Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 0

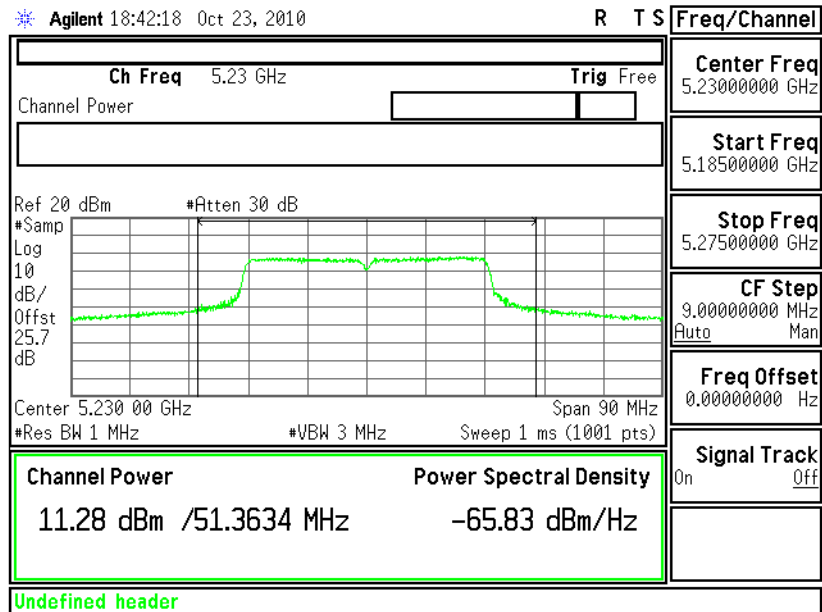
Agilent 18:43:08 Oct 23, 2010

R T S

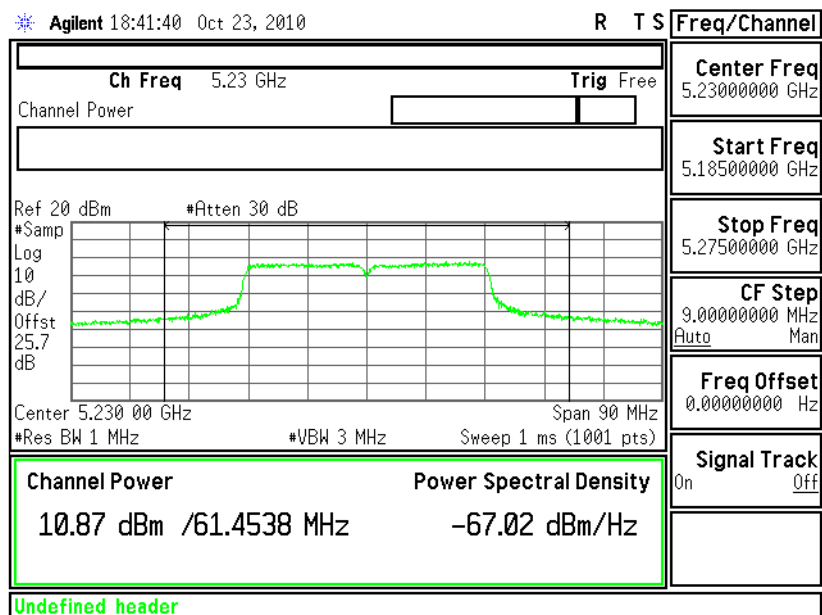




Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 1



Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 2

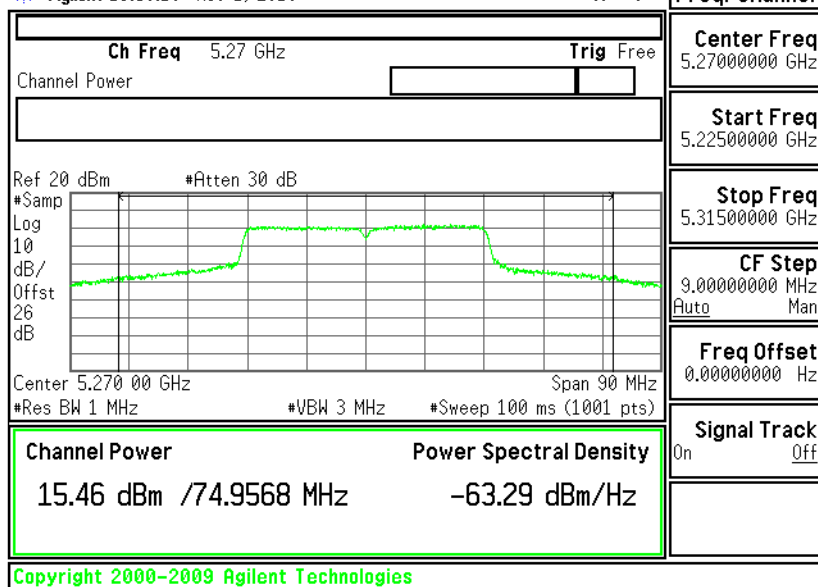




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 0

Agilent 13:59:10 Nov 1, 2010

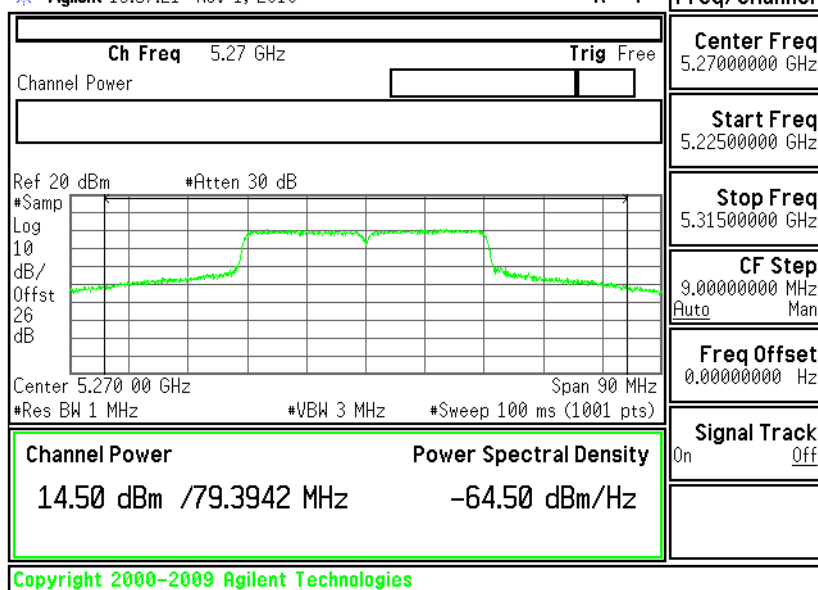
R T



Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 1

Agilent 13:57:21 Nov 1, 2010

R T

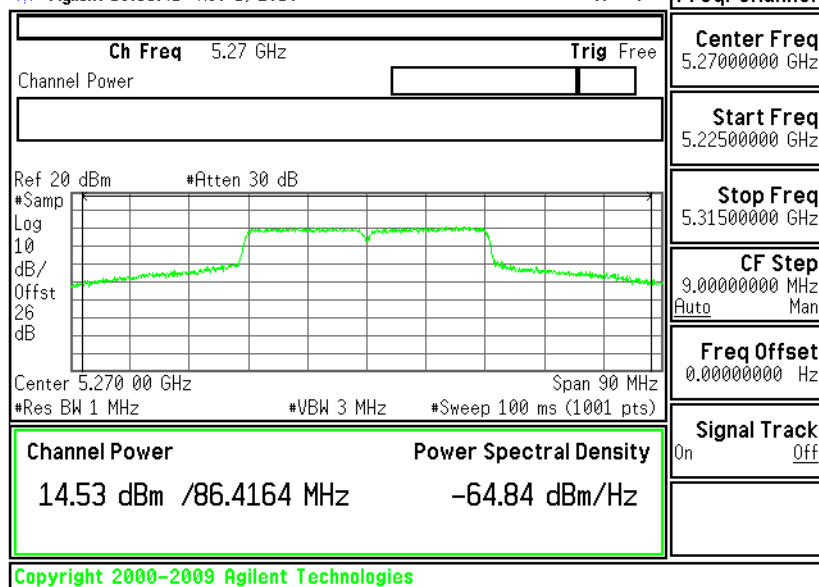




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 2

Agilent 13:55:41 Nov 1, 2010

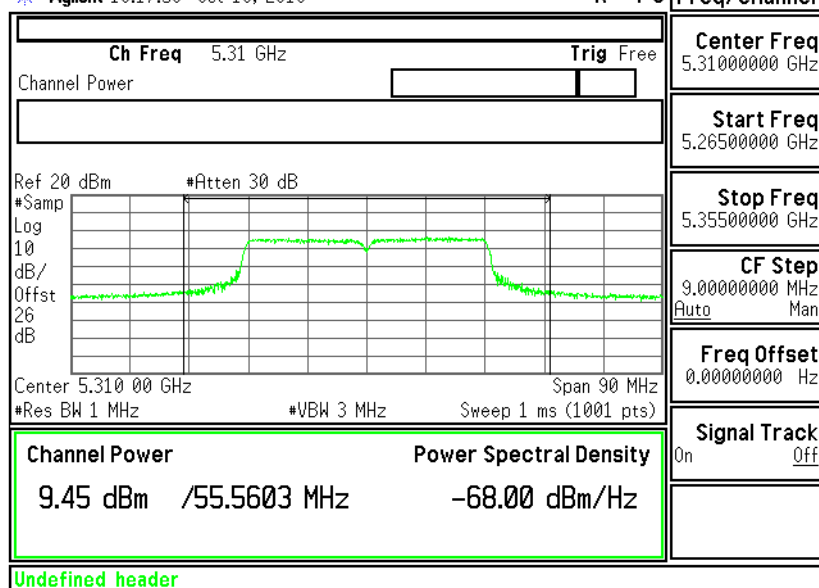
R T



Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 0

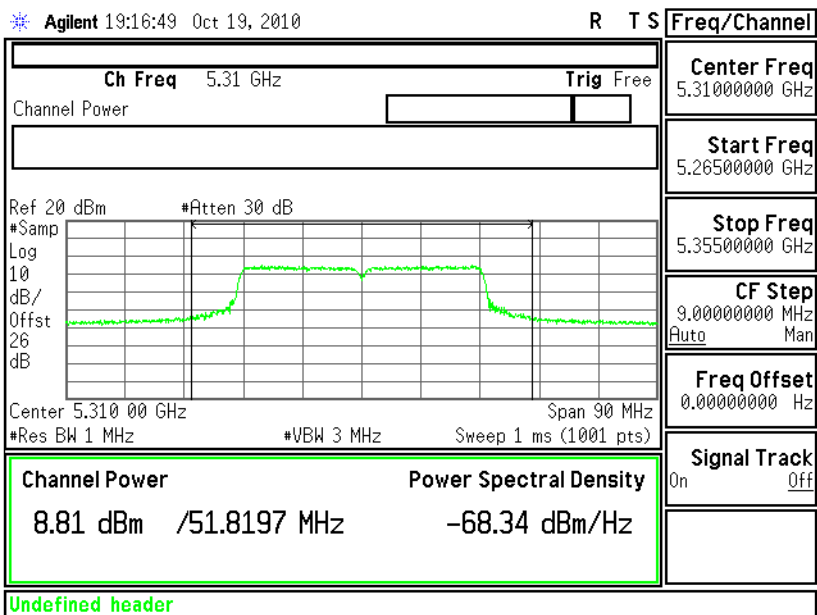
Agilent 19:17:50 Oct 19, 2010

R T S

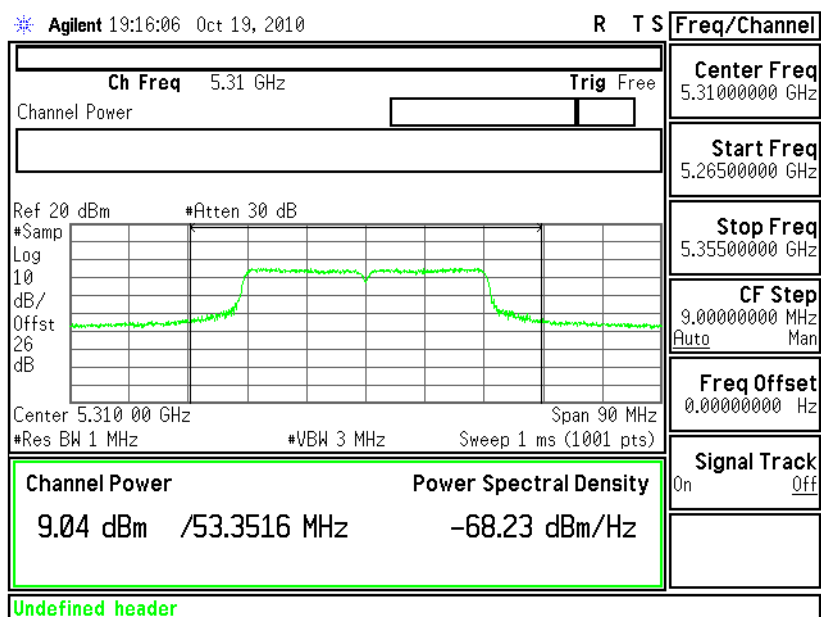




Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 1

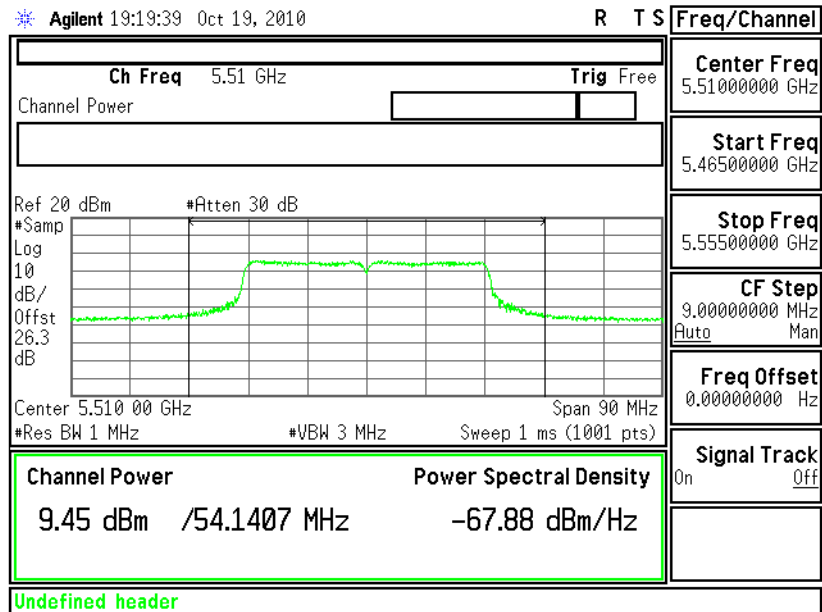


Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 2

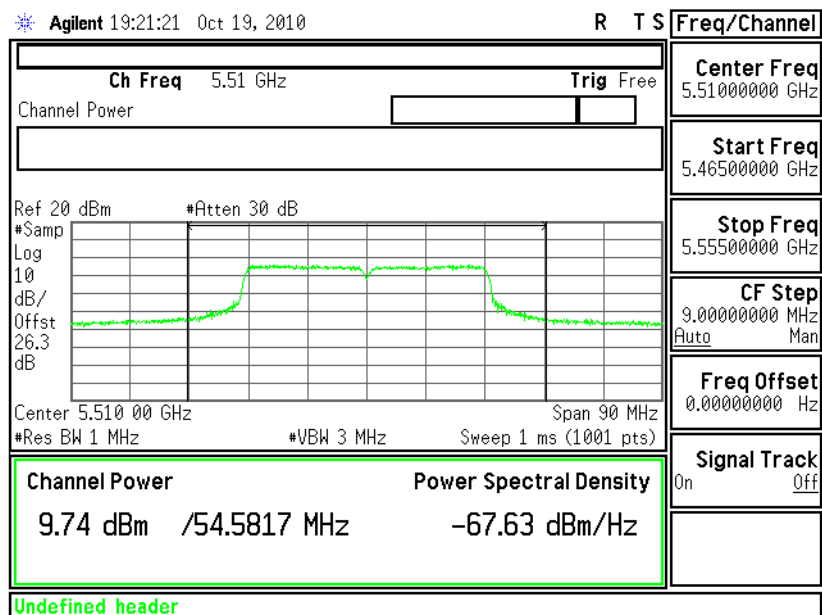




Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 1

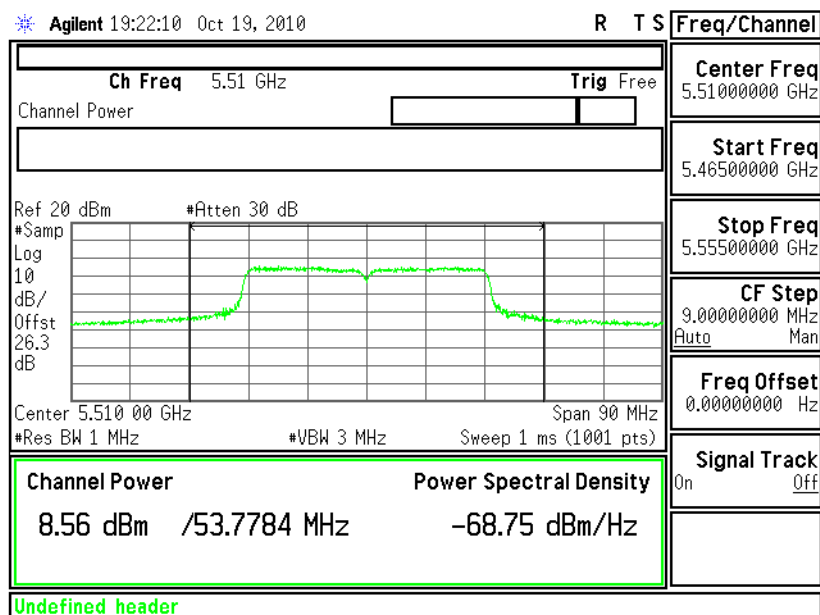




Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 2

Agilent 19:22:10 Oct 19, 2010

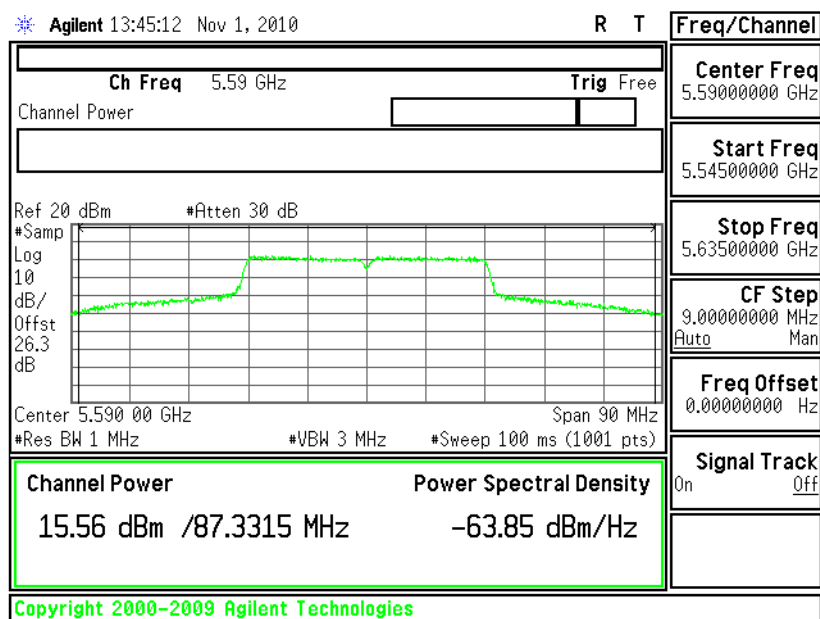
R T S



Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 0

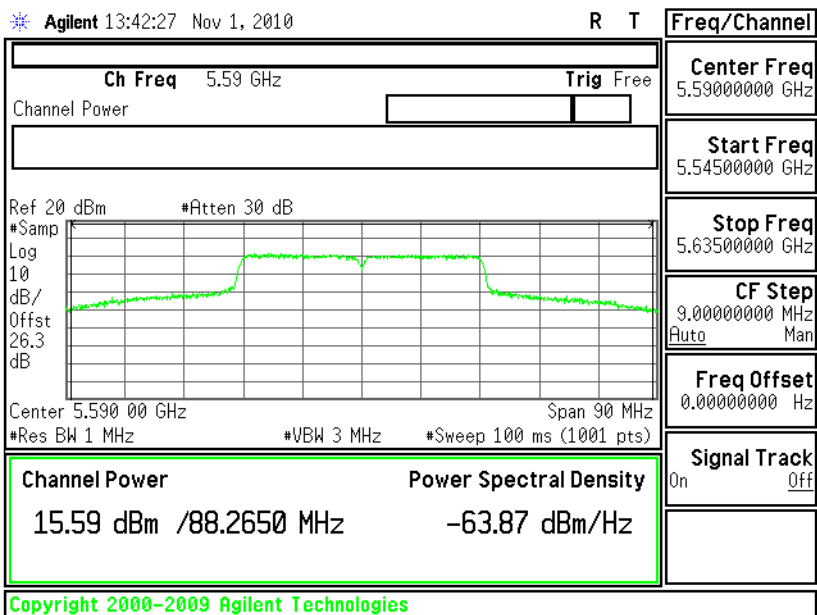
Agilent 13:45:12 Nov 1, 2010

R T

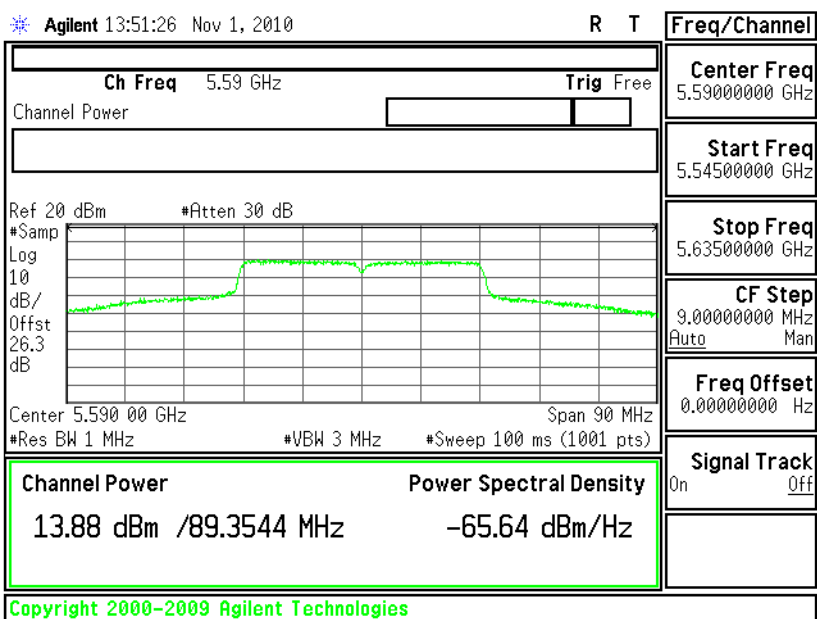




Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 1



Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 2

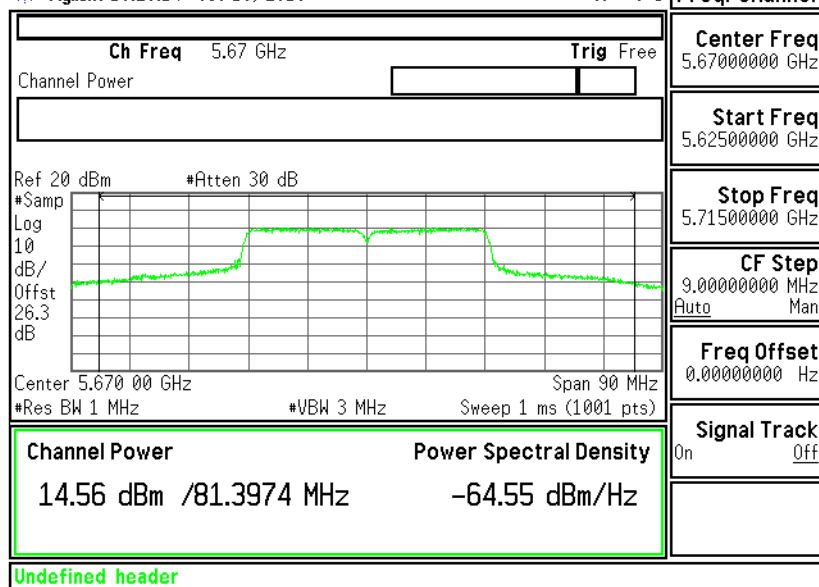




Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 0

Agilent 19:29:14 Oct 19, 2010

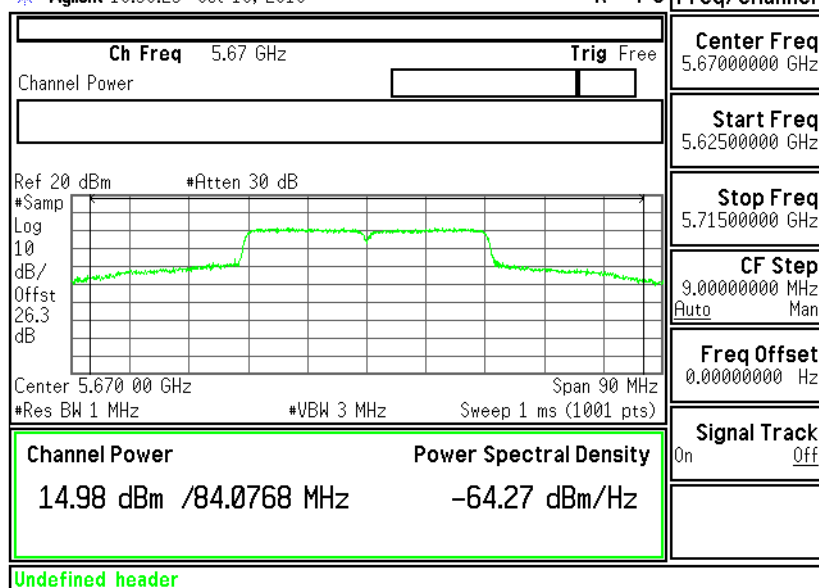
R T S



Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 1

Agilent 19:30:23 Oct 19, 2010

R T S

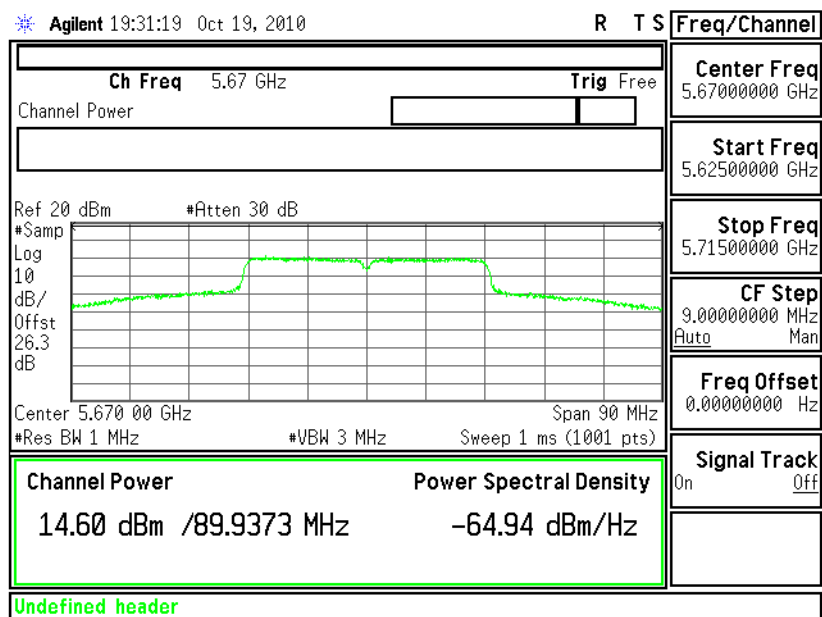




Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 2

Agilent 19:31:19 Oct 19, 2010

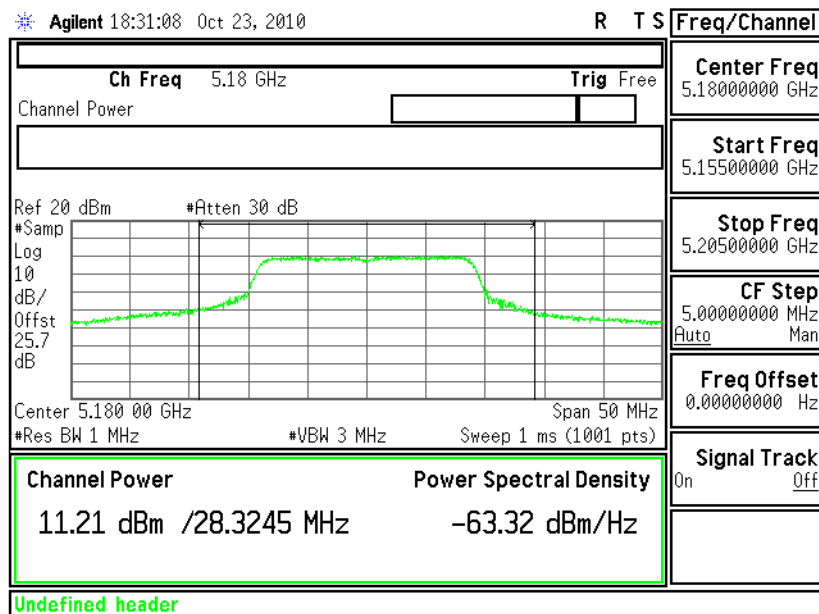
R T S



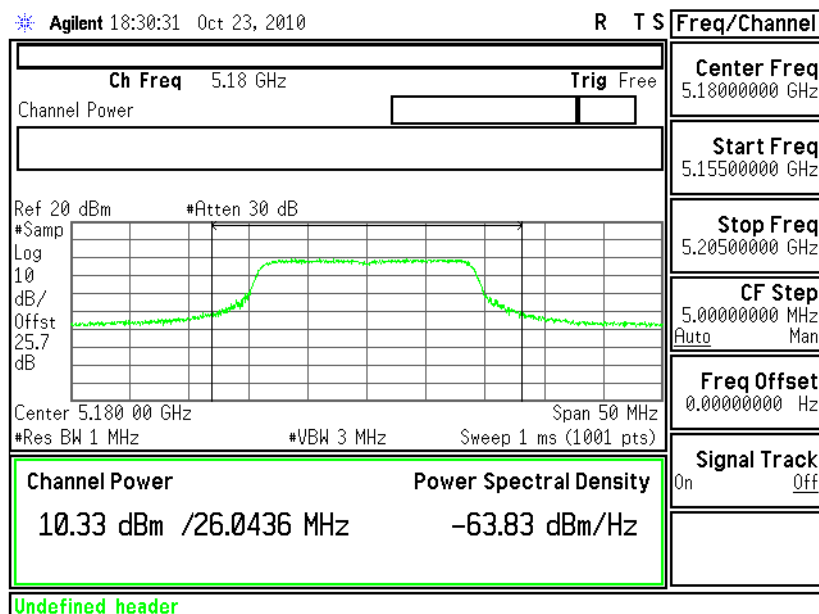


<Beam-Forming Off: 2x3>

Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 36 - Chain 1

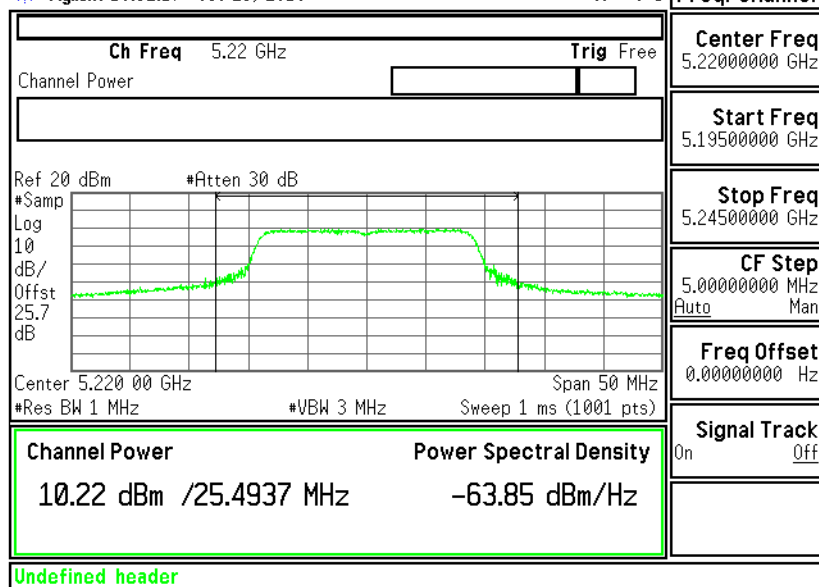




Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 0

Agilent 18:32:17 Oct 23, 2010

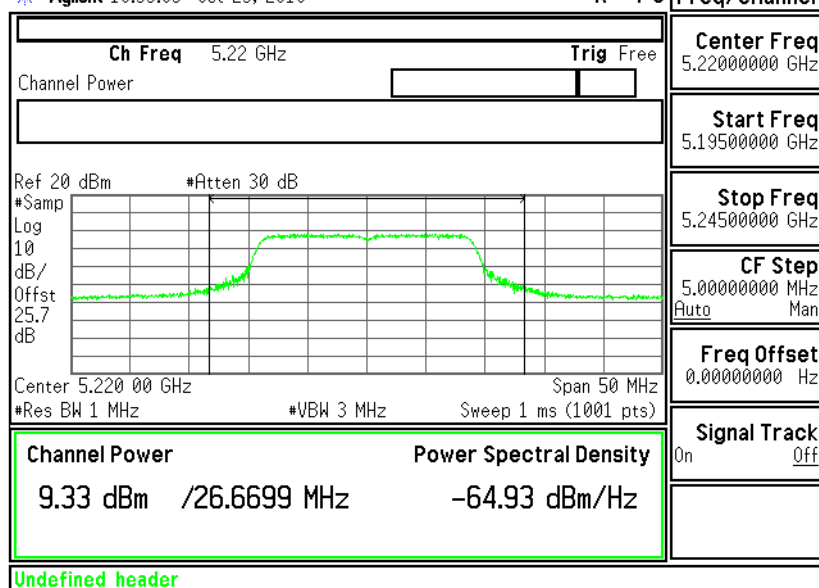
R T S



Output Power Plot on 802.11n (HT-20) Channel 44 - Chain 1

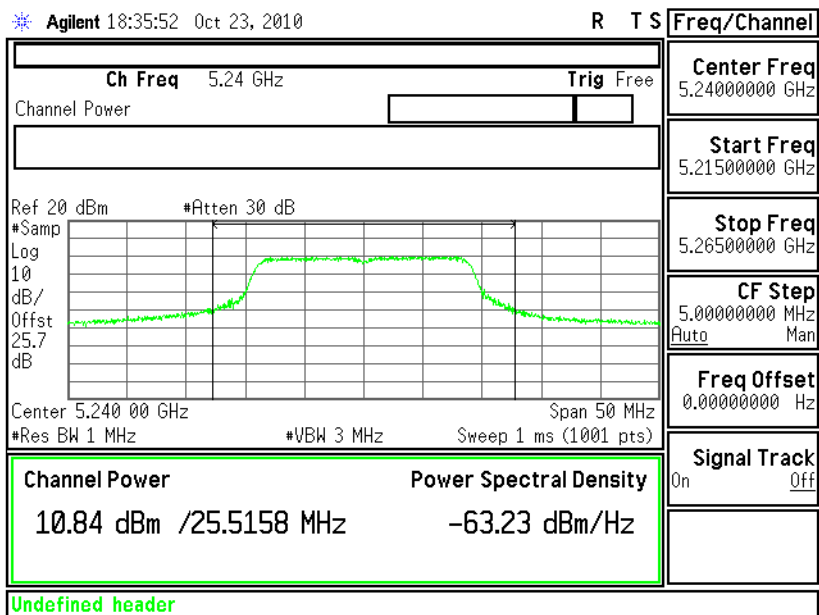
Agilent 18:33:03 Oct 23, 2010

R T S

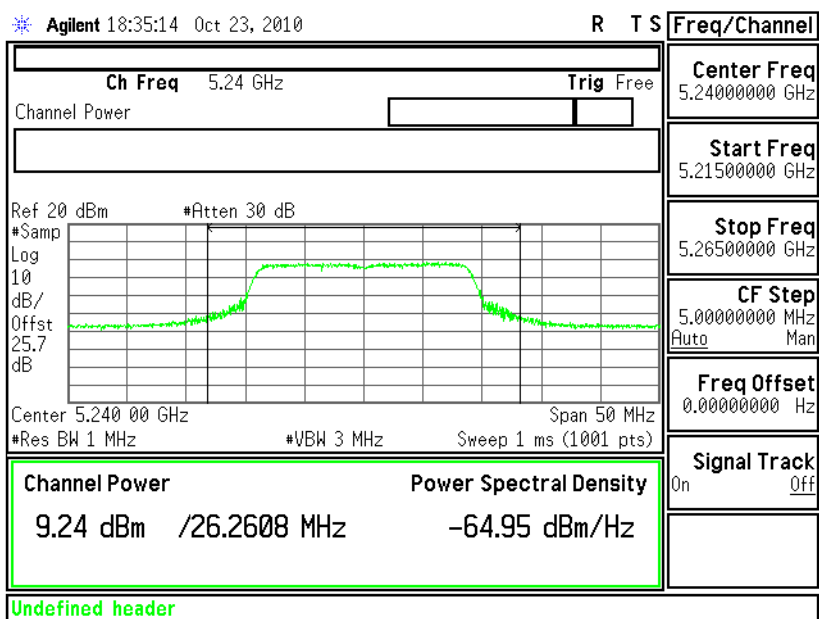




Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 48 - Chain 1

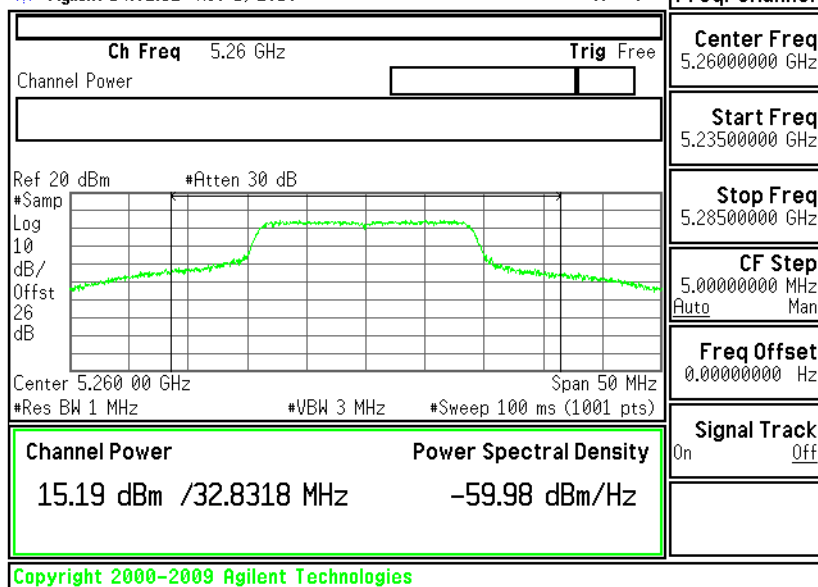




Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 0

Agilent 14:02:52 Nov 1, 2010

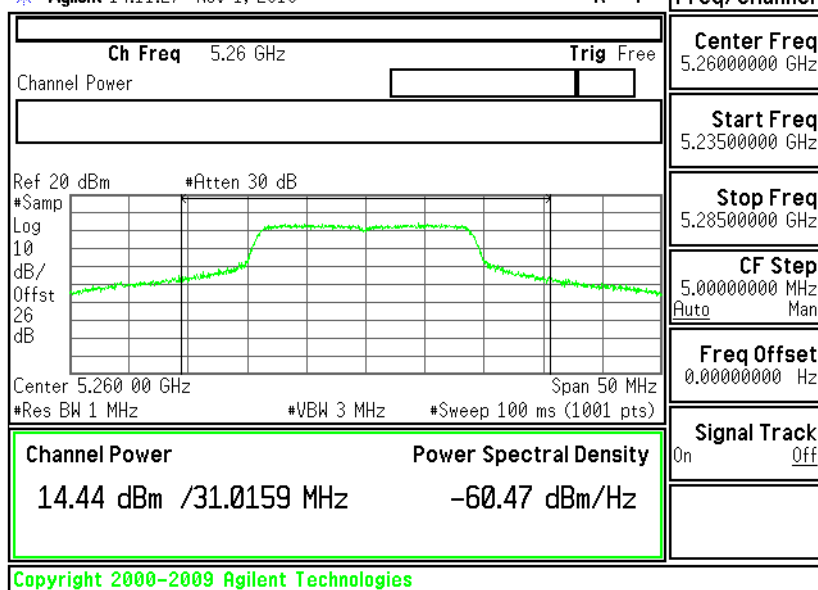
R T



Output Power Plot on 802.11n (HT-20) Channel 52 - Chain 1

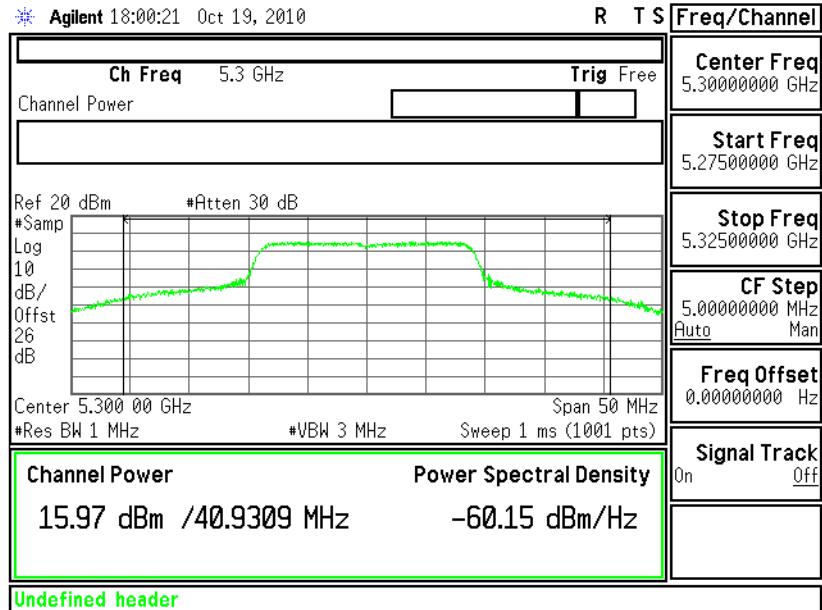
Agilent 14:11:27 Nov 1, 2010

R T

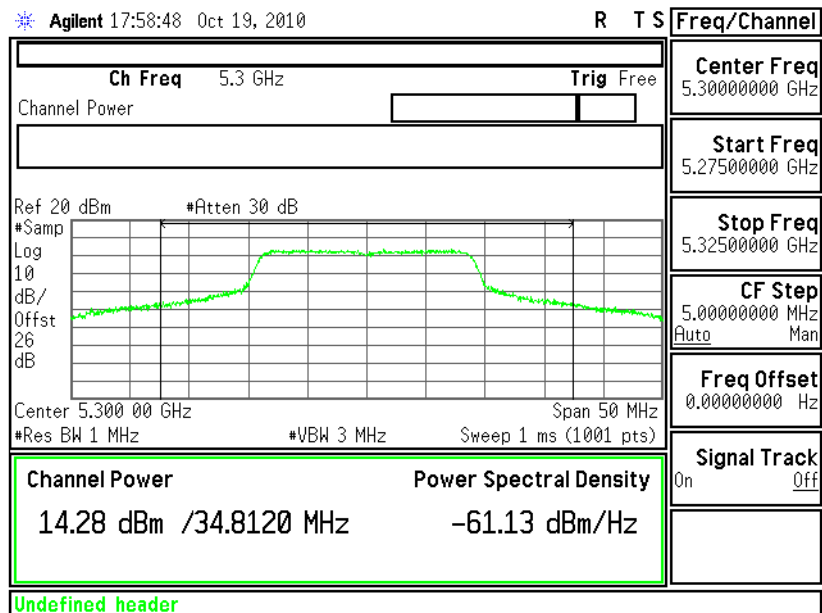




Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 0

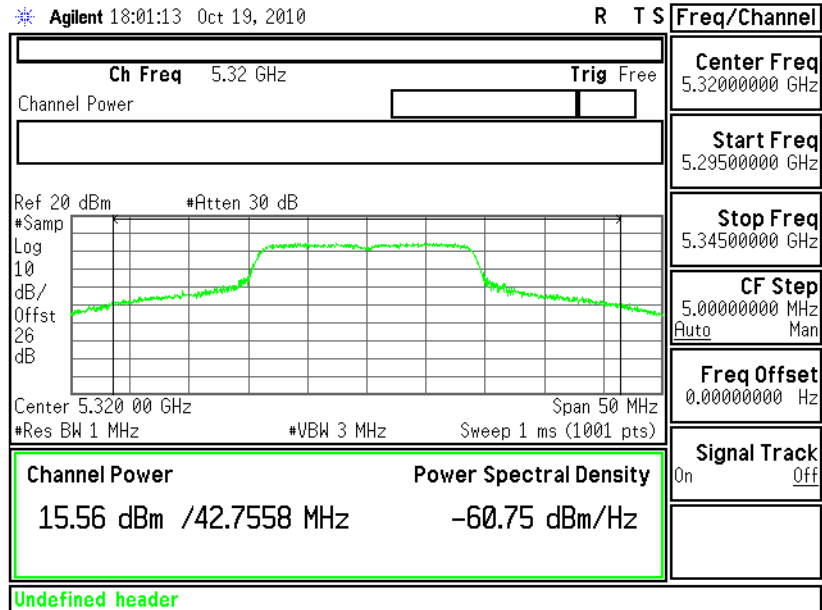


Output Power Plot on 802.11n (HT-20) Channel 60 - Chain 1

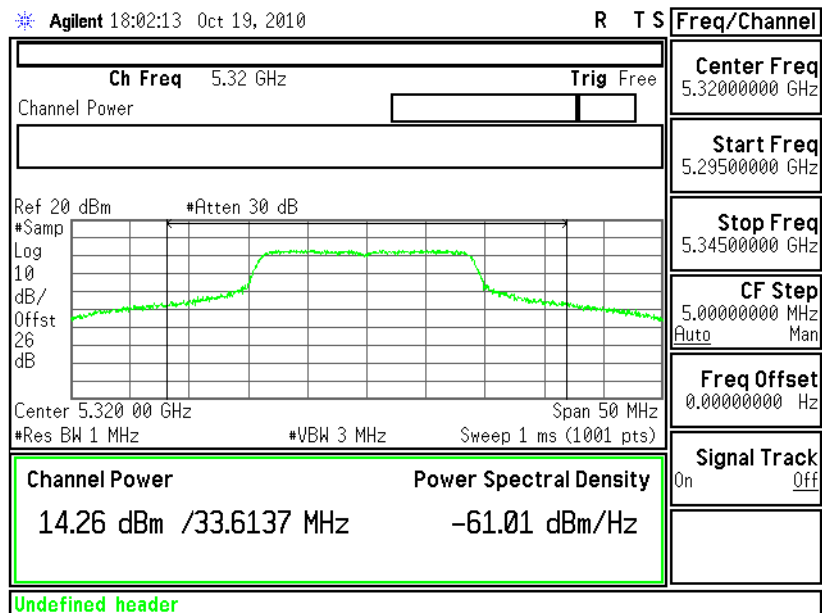




Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 0



Output Power Plot on 802.11n (HT-20) Channel 64 - Chain 1

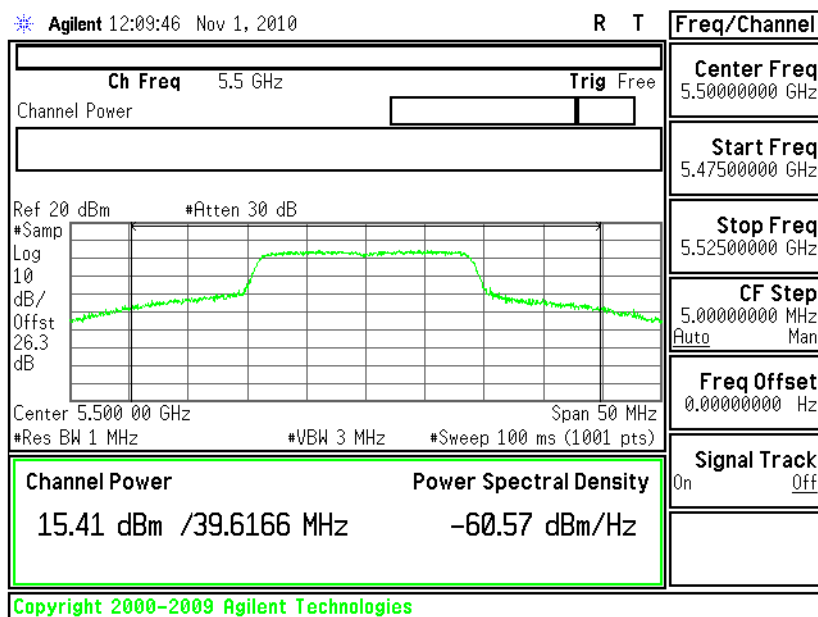




Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 0

Agilent 12:09:46 Nov 1, 2010

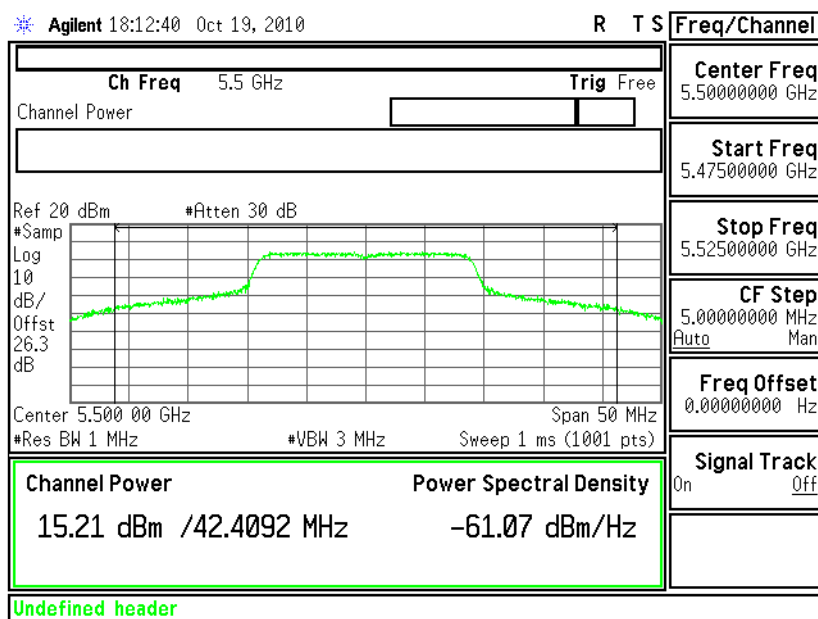
R T



Output Power Plot on 802.11n (HT-20) Channel 100 - Chain 1

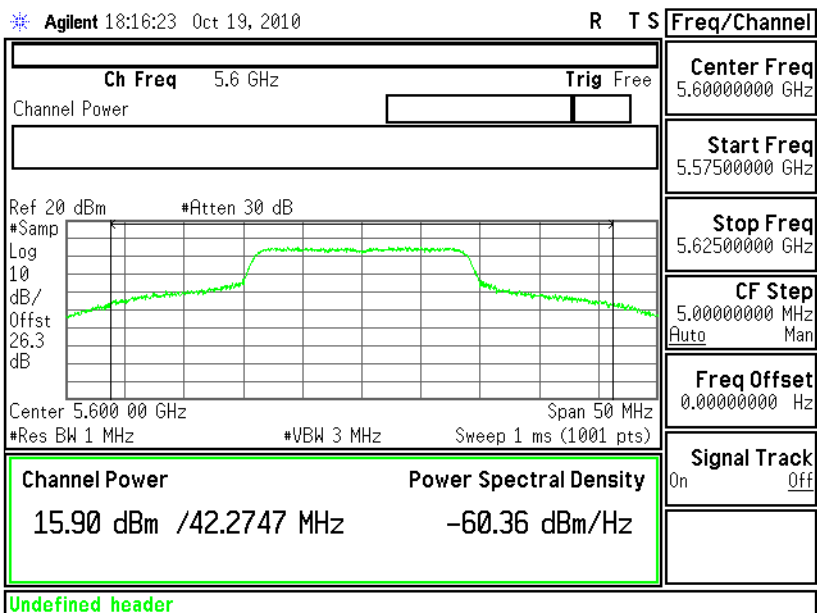
Agilent 18:12:40 Oct 19, 2010

R T S

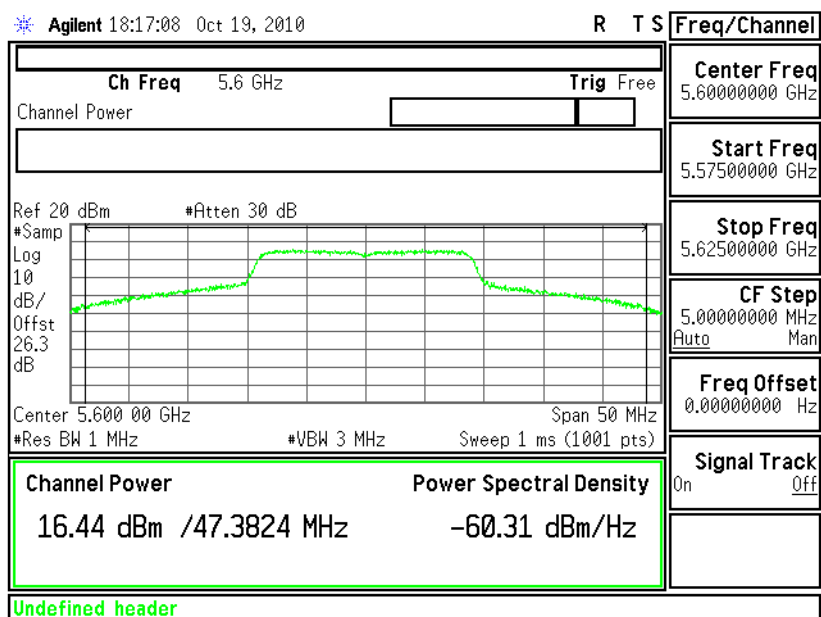




Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 0

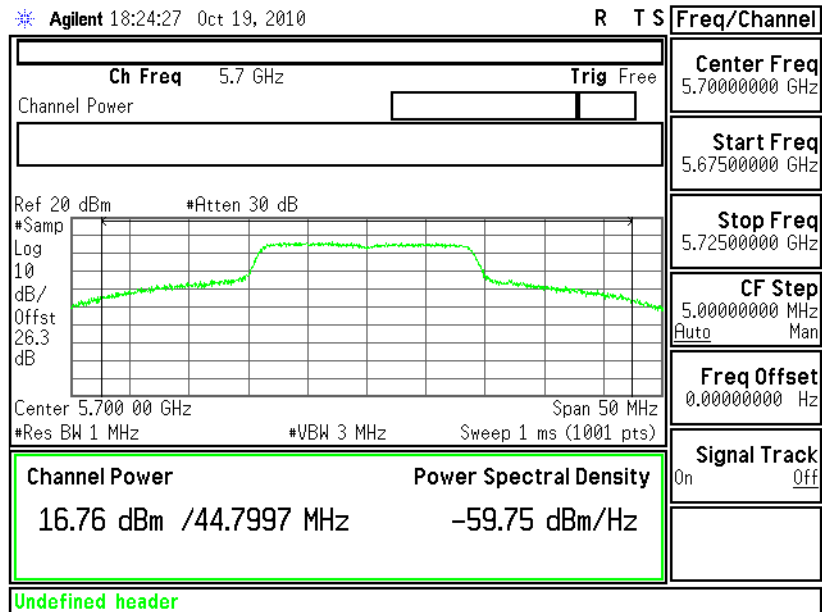


Output Power Plot on 802.11n (HT-20) Channel 120 - Chain 1

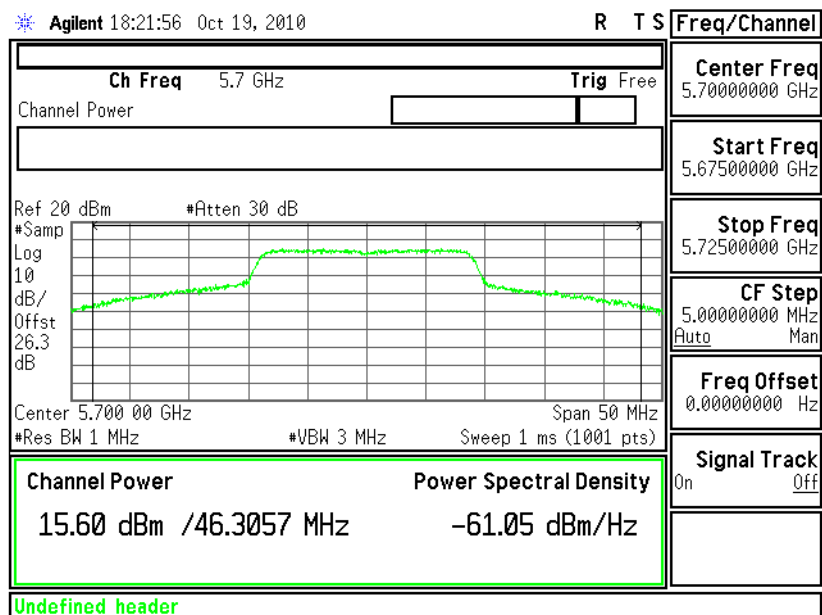




Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 0

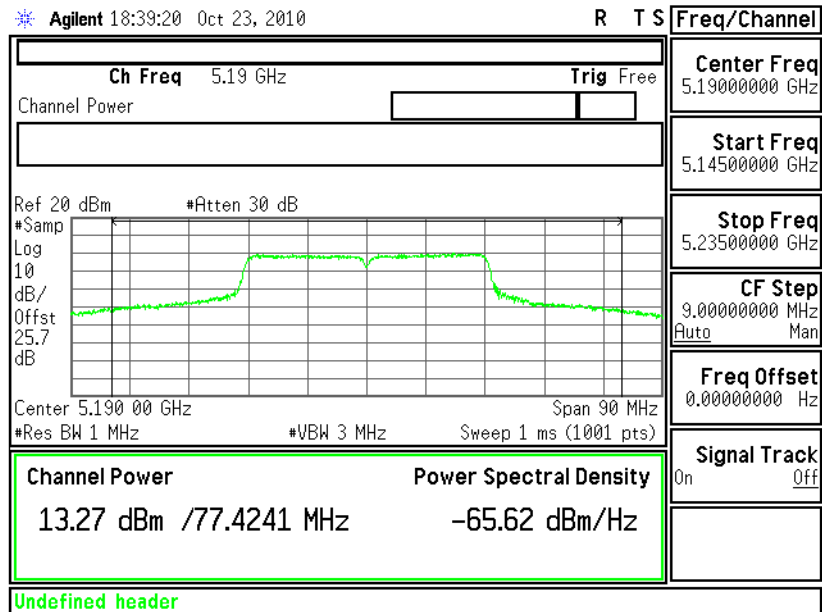


Output Power Plot on 802.11n (HT-20) Channel 140 - Chain 1

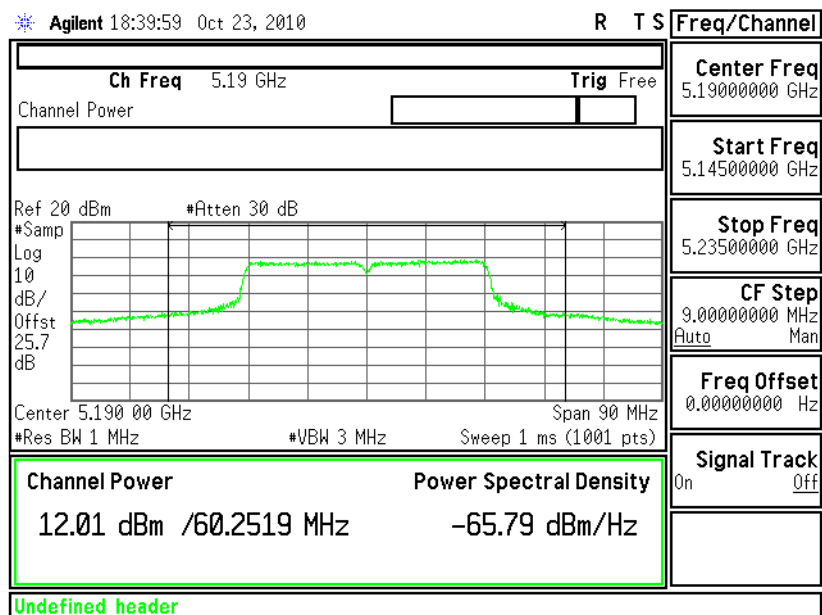




Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 38 - Chain 1

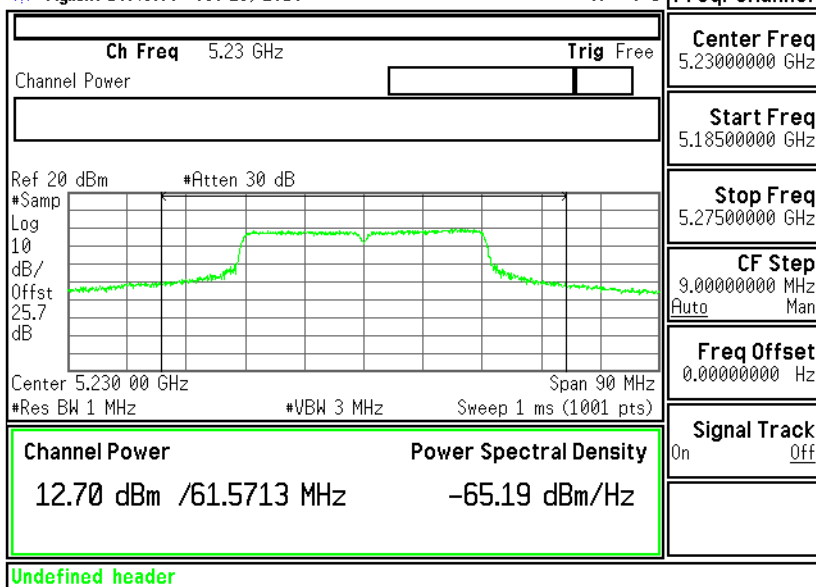




Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 0

Agilent 18:43:08 Oct 23, 2010

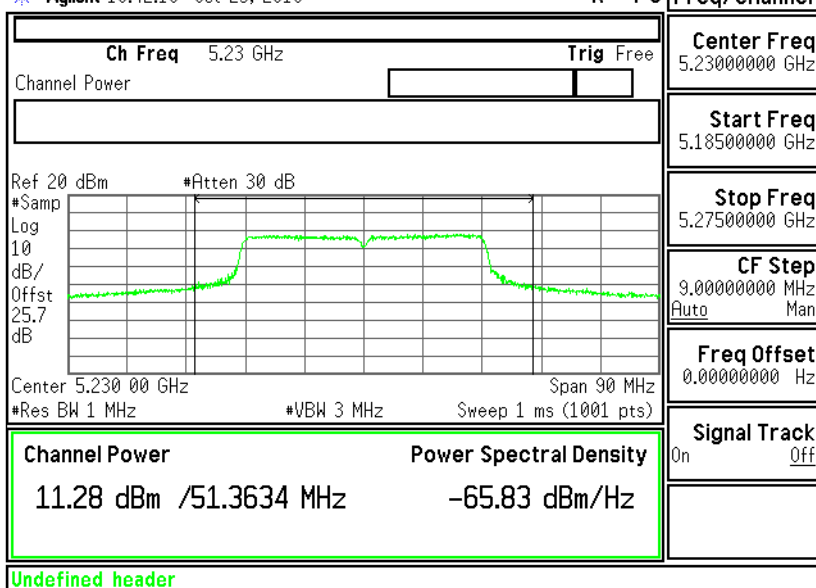
R T S



Output Power Plot on 802.11n (HT-40) Channel 46 - Chain 1

Agilent 18:42:18 Oct 23, 2010

R T S

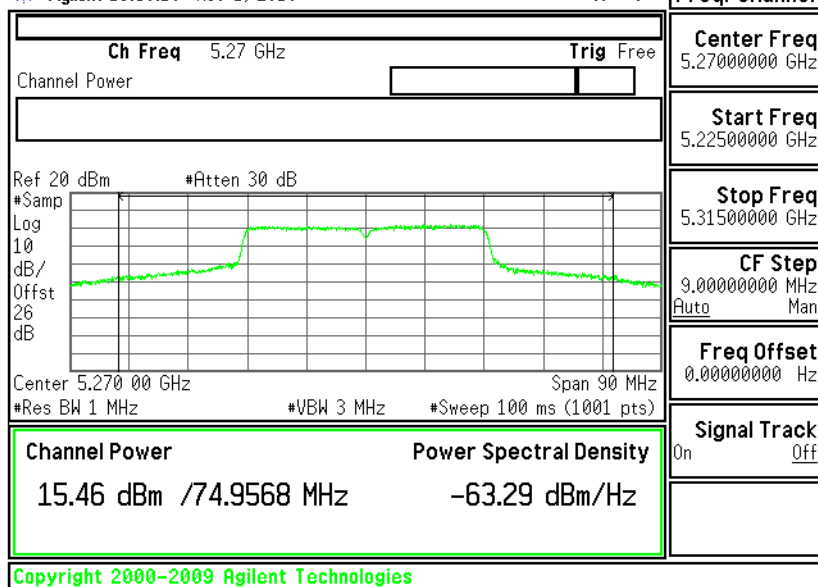




Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 0

Agilent 13:59:10 Nov 1, 2010

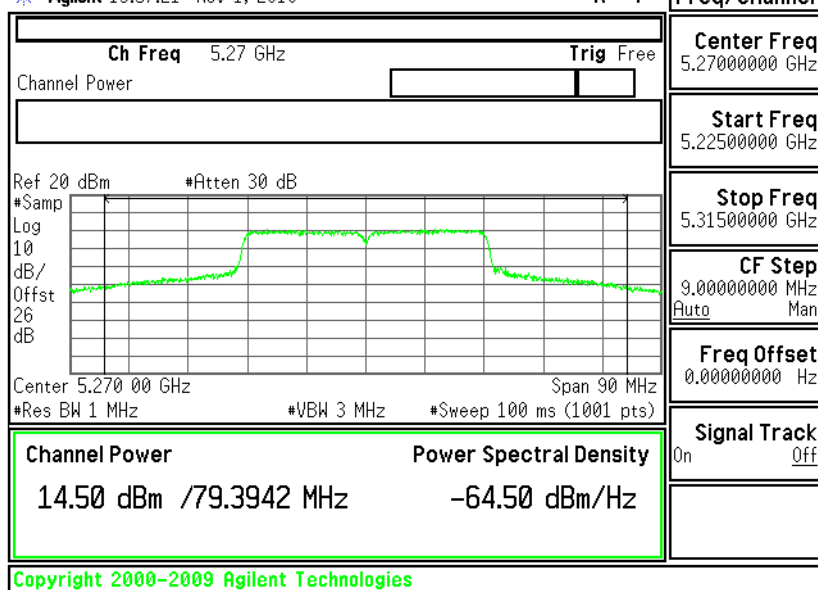
R T



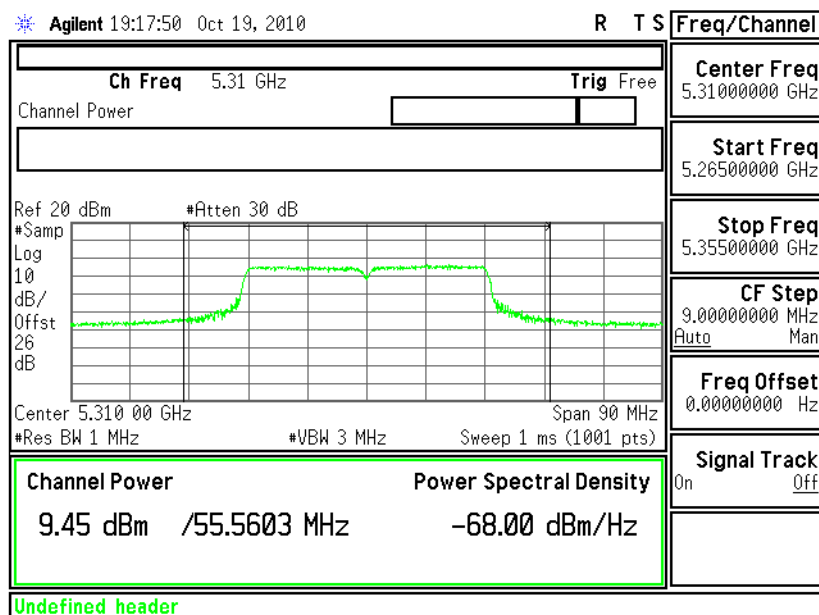
Output Power Plot on 802.11n (HT-40) Channel 54 - Chain 1

Agilent 13:57:21 Nov 1, 2010

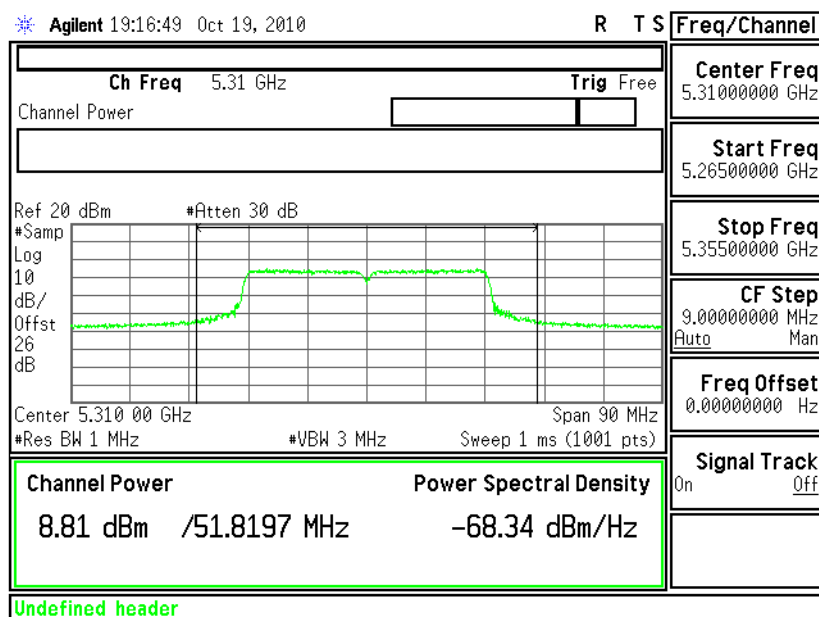
R T



Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 0

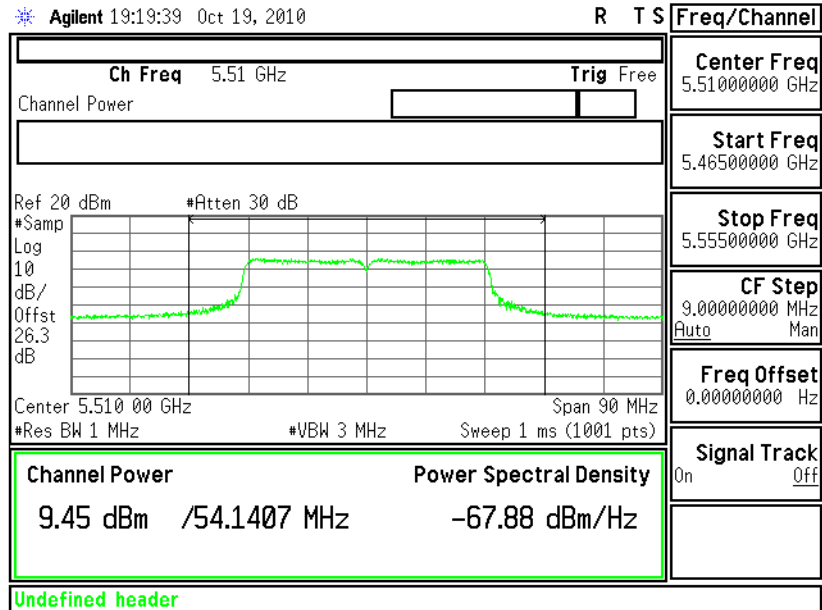


Output Power Plot on 802.11n (HT-40) Channel 62 - Chain 1

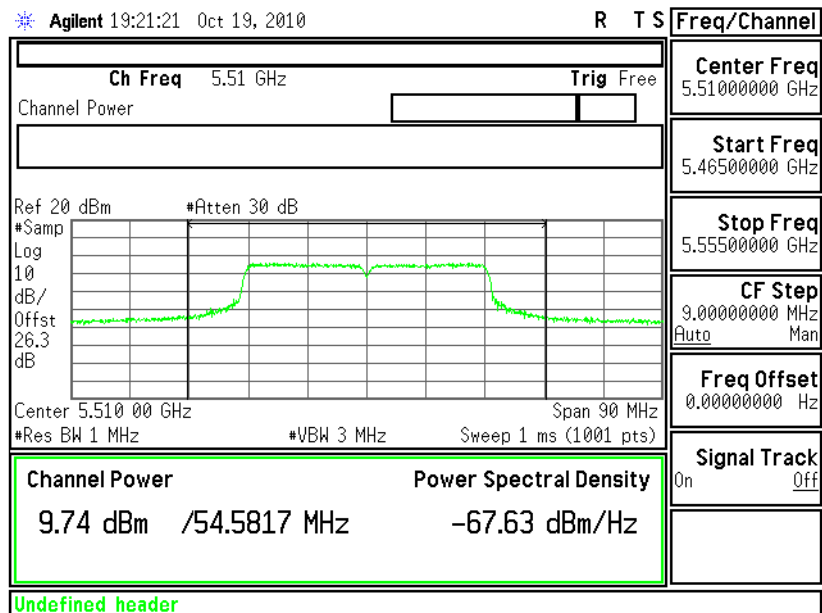




Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 0

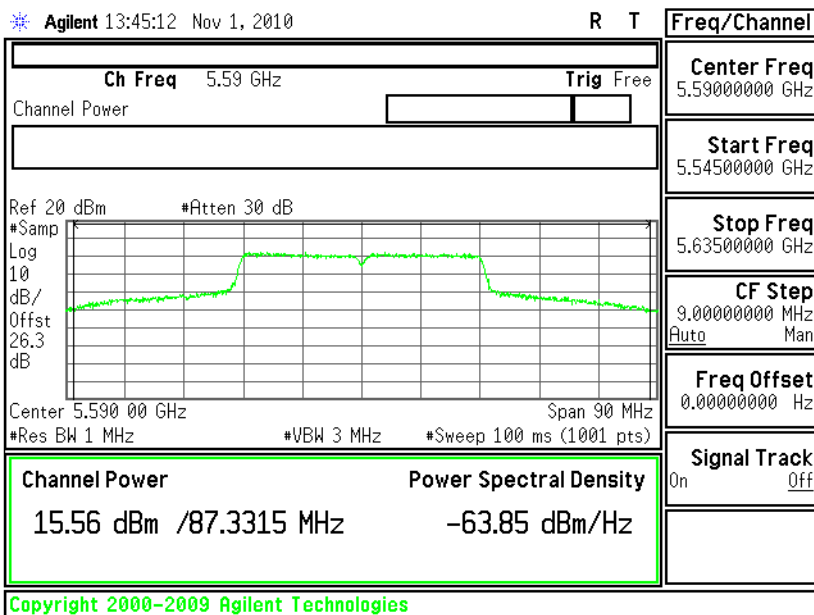


Output Power Plot on 802.11n (HT-40) Channel 102 - Chain 1

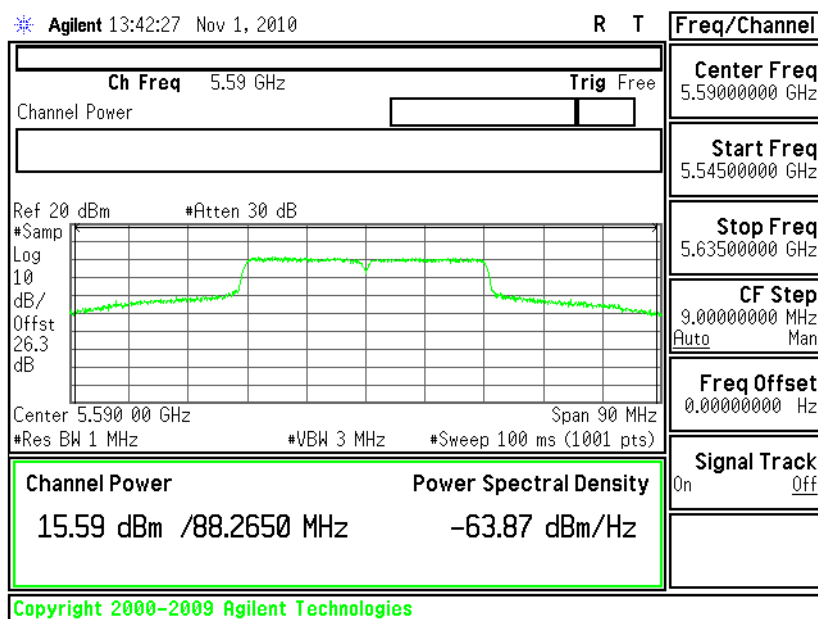




Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 0

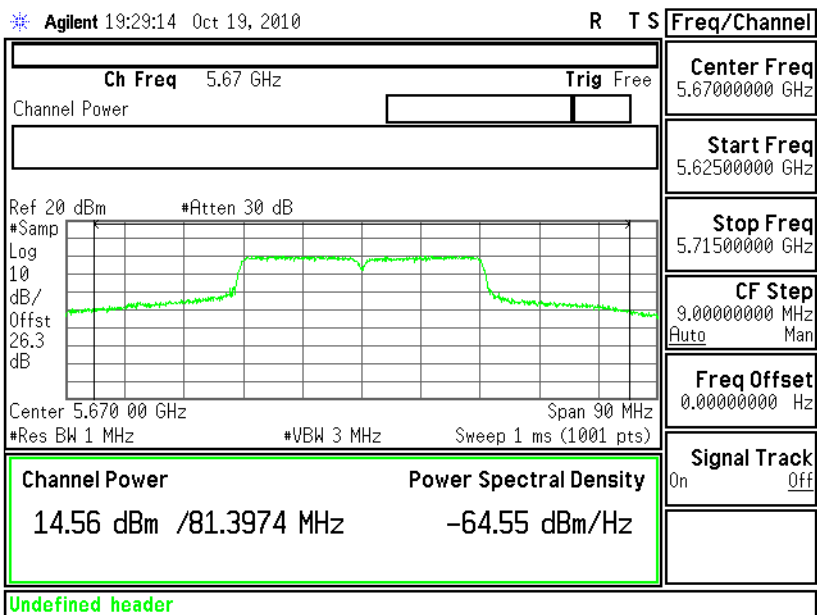


Output Power Plot on 802.11n (HT-40) Channel 118 - Chain 1

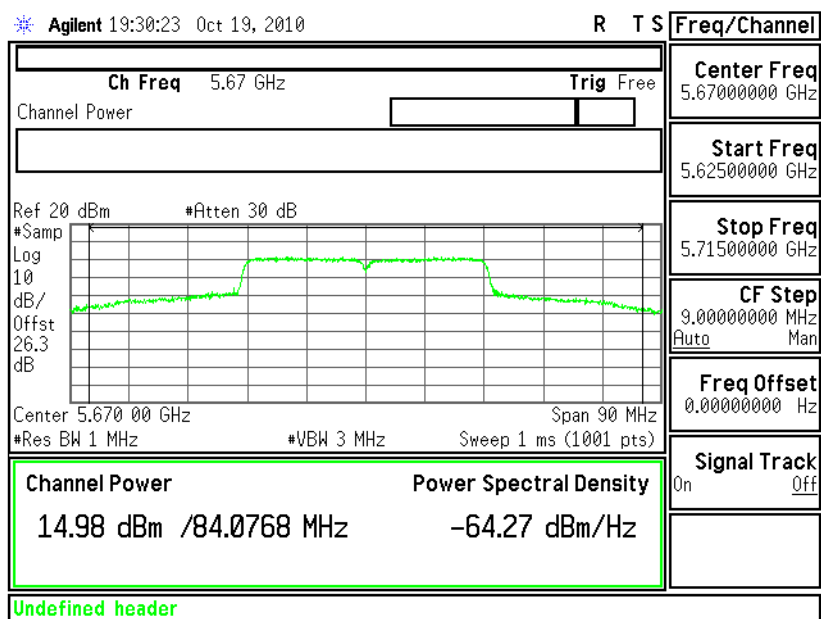




Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 0



Output Power Plot on 802.11n (HT-40) Channel 134 - Chain 1



3.5 Band Edges Measurement

3.5.1 Limit of Band Edges

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. Devices operating in the 5.25–5.35 GHz band that generate emissions in the 5.15–5.25 GHz band must meet all applicable technical requirements for operation in the 5.15–5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of –27 dBm/MHz in the 5.15–5.25 GHz band. For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- (2) The provisions of Section 15.205 Restricted bands of operation of this part apply to intentional radiators operating under this section.

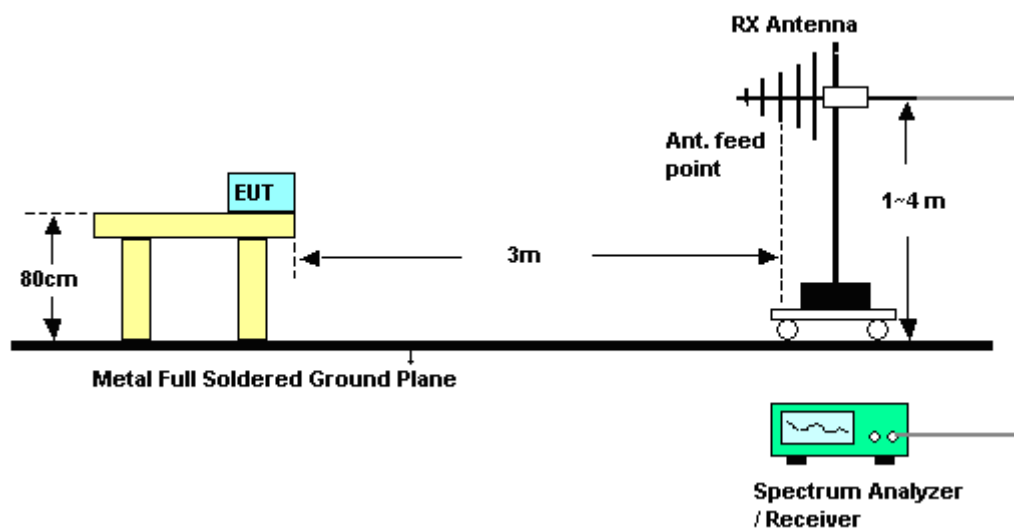
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. Set both RBW and VBW of spectrum analyzer to 1MHz with convenient frequency span including 1MHz bandwidth from band edge.
2. The band edges was measured and recorded.

3.5.4 Test Setup



3.5.6 Test Result of Radiated Band Edges

<Normal: 3x3>

Test Mode :	802.11a L channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	61.52	-12.48	74	52.51	34.25	9.41	34.65	100	292	Peak
5150	43.16	-10.84	54	34.15	34.25	9.41	34.65	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148	68.93	-5.07	74	59.92	34.25	9.41	34.65	100	292	Peak
5148	48.09	-5.91	54	39.08	34.25	9.41	34.65	100	292	Average

Test Mode :	802.11a H channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.56	67.48	-6.52	74	58.69	34.45	9.74	35.4	100	292	Peak
5350.56	43.59	-10.41	54	34.8	34.45	9.74	35.4	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	73.17	-0.83	74	64.38	34.45	9.74	35.4	100	292	Peak
5350	49.7	-4.3	54	40.91	34.45	9.74	35.4	100	292	Average



Test Mode :	802.11a L channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	67.6	-20.7	88.3	59.75	34.17	6.87	33.19	100	255	Peak
5470	47.36	-20.94	68.3	39.51	34.17	6.87	33.19	100	255	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	75.23	-13.07	88.3	67.38	34.17	6.87	33.19	100	255	Peak
5470	56.35	-11.95	68.3	48.5	34.17	6.87	33.19	100	255	Average

Test Mode :	802.11a H channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	71.8	-16.5	88.3	63.47	34.51	7.01	33.19	100	280	Peak
5725	47.74	-20.56	68.3	39.41	34.51	7.01	33.19	100	280	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.82	-9.48	88.3	70.49	34.51	7.01	33.19	100	280	Peak
5725	60.92	-7.38	68.3	52.59	34.51	7.01	33.19	100	280	Average



<Normal: 2x3>

Test Mode :	802.11a L channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.55	63.35	-10.65	74	56.06	33.92	6.7	33.33	100	297	Peak
5149.55	39.81	-14.19	54	32.52	33.92	6.7	33.33	100	297	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.25	69.56	-4.44	74	62.27	33.92	6.7	33.33	100	297	Peak
5149.25	43.43	-10.57	54	36.14	33.92	6.7	33.33	100	297	Average

Test Mode :	802.11a H channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5353.85	65.94	-8.06	74	58.3	34.08	6.8	33.24	100	295	Peak
5353.85	49.62	-4.38	54	41.98	34.08	6.8	33.24	100	295	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.33	73.48	-0.52	74	65.84	34.08	6.8	33.24	100	295	Peak
5350.33	53.16	-0.84	54	45.52	34.08	6.8	33.24	100	295	Average



Test Mode :	802.11a L channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	62.67	-25.63	88.3	54.82	34.17	6.87	33.19	100	271	Peak
5470	42.77	-25.53	68.3	34.92	34.17	6.87	33.19	100	271	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	74.18	-14.12	88.3	66.33	34.17	6.87	33.19	100	271	Peak
5470	51.15	-17.15	68.3	43.3	34.17	6.87	33.19	100	271	Average

Test Mode :	802.11a H channel	Temperature :	23~25°C
Test Band :	802.11a	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	59	-29.3	88.3	50.67	34.51	7.01	33.19	100	262	Peak
5725	44.1	-24.2	68.3	35.77	34.51	7.01	33.19	100	262	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.2	-10.1	88.3	69.87	34.51	7.01	33.19	100	262	Peak
5725	55.18	-13.12	68.3	46.85	34.51	7.01	33.19	100	262	Average



<Beam-Forming On: 3x3>

Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.04	62.82	-11.18	74	53.81	34.25	9.41	34.65	100	292	Peak
5147.04	44	-10	54	34.99	34.25	9.41	34.65	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148	68.56	-5.44	74	59.55	34.25	9.41	34.65	100	292	Peak
5148	48.72	-5.28	54	39.71	34.25	9.41	34.65	100	292	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	63.69	-10.31	74	54.9	34.45	9.74	35.4	100	292	Peak
5350	41.61	-12.39	54	32.82	34.45	9.74	35.4	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	71.09	-2.91	74	62.3	34.45	9.74	35.4	100	292	Peak
5350	47.49	-6.51	54	38.7	34.45	9.74	35.4	100	292	Average



Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	73.05	-15.25	88.3	65.2	34.17	6.87	33.19	100	255	Peak
5470	50.21	-18.09	68.3	42.36	34.17	6.87	33.19	100	255	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	84.04	-4.26	88.3	76.19	34.17	6.87	33.19	100	255	Peak
5470	59.82	-8.48	68.3	51.97	34.17	6.87	33.19	100	255	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	66.96	-21.34	88.3	58.63	34.51	7.01	33.19	100	280	Peak
5725	49.09	-19.21	68.3	40.76	34.51	7.01	33.19	100	280	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.73	-9.57	88.3	70.4	34.51	7.01	33.19	100	280	Peak
5725	57.01	-11.29	68.3	48.68	34.51	7.01	33.19	100	280	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	38	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148	58.51	-15.49	74	49.5	34.25	9.41	34.65	100	95	Peak
5148	42.89	-11.11	54	33.88	34.25	9.41	34.65	100	95	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	68.85	-5.15	74	59.84	34.25	9.41	34.65	100	95	Peak
5150	53.11	-0.89	54	44.1	34.25	9.41	34.65	100	95	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	62	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.52	63.31	-10.69	74	54.52	34.45	9.74	35.4	100	273	Peak
5351.52	46.1	-7.9	54	37.31	34.45	9.74	35.4	100	273	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	73.66	-0.34	74	64.87	34.45	9.74	35.4	100	273	Peak
5350	52.37	-1.63	54	43.58	34.45	9.74	35.4	100	273	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	102	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	70.35	-17.95	88.3	62.5	34.17	6.87	33.19	100	110	Peak
5470	52.85	-15.45	68.3	45	34.17	6.87	33.19	100	110	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	77.42	-10.88	88.3	69.57	34.17	6.87	33.19	100	110	Peak
5470	58.11	-10.19	68.3	50.26	34.17	6.87	33.19	100	110	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	134	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	70.87	-17.43	88.3	62.54	34.51	7.01	33.19	100	259	Peak
5725	48.68	-19.62	68.3	40.35	34.51	7.01	33.19	100	259	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	84.29	-4.01	88.3	75.96	34.51	7.01	33.19	100	259	Peak
5725	64.36	-3.94	68.3	56.03	34.51	7.01	33.19	100	259	Average



<Beam-Forming On: 2x3>

Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.6	61.89	-12.11	74	54.6	33.92	6.7	33.33	100	297	Peak
5147.6	41.7	-12.3	54	34.41	33.92	6.7	33.33	100	297	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.95	70.47	-3.53	74	63.18	33.92	6.7	33.33	100	297	Peak
5148.95	46.81	-7.19	54	39.52	33.92	6.7	33.33	100	297	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.65	63.14	-10.86	74	55.5	34.08	6.8	33.24	100	295	Peak
5351.65	49.11	-4.89	54	41.47	34.08	6.8	33.24	100	295	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.55	73.68	-0.32	74	66.04	34.08	6.8	33.24	100	295	Peak
5350.55	51.81	-2.19	54	44.17	34.08	6.8	33.24	100	295	Average



Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	65.4	-22.9	88.3	57.55	34.17	6.87	33.19	100	271	Peak
5470	45.38	-22.92	68.3	37.53	34.17	6.87	33.19	100	271	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	75.51	-12.79	88.3	67.66	34.17	6.87	33.19	100	271	Peak
5470	54.87	-13.43	68.3	47.02	34.17	6.87	33.19	100	271	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	65.44	-22.86	88.3	57.11	34.51	7.01	33.19	100	265	Peak
5725	47.17	-21.13	68.3	38.84	34.51	7.01	33.19	100	265	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	82.98	-5.32	88.3	74.65	34.51	7.01	33.19	100	265	Peak
5725	62.11	-6.19	68.3	53.78	34.51	7.01	33.19	100	265	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	38	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144.45	68.87	-5.13	74	61.58	33.92	6.7	33.33	100	293	Peak
5144.45	48	-6	54	40.71	33.92	6.7	33.33	100	293	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144.15	71.87	-2.13	74	64.58	33.92	6.7	33.33	100	293	Peak
5144.15	53.37	-0.63	54	46.08	33.92	6.7	33.33	100	293	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	62	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.98	66.94	-7.06	74	59.3	34.08	6.8	33.24	100	295	Peak
5351.98	50.25	-3.75	54	42.61	34.08	6.8	33.24	100	295	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5355.72	72.68	-1.32	74	65.04	34.08	6.8	33.24	100	295	Peak
5355.72	53.42	-0.58	54	45.78	34.08	6.8	33.24	100	295	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	102	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	71.29	-17.01	88.3	62.96	34.51	7.01	33.19	102	247	Peak
5470	54.97	-13.33	68.3	46.64	34.51	7.01	33.19	102	247	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	76.85	-11.45	88.3	68.52	34.51	7.01	33.19	102	247	Peak
5470	61.18	-7.12	68.3	53.33	34.17	6.87	33.19	102	247	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	134	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	58.88	-29.42	88.3	50.55	34.51	7.01	33.19	100	266	Peak
5725	42.84	-25.46	68.3	34.51	34.51	7.01	33.19	100	266	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	68.69	-19.61	88.3	60.36	34.51	7.01	33.19	100	266	Peak
5725	49.09	-19.21	68.3	40.76	34.51	7.01	33.19	100	266	Average



<Beam-Forming Off: 3x3>

Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.04	62.82	-11.18	74	53.81	34.25	9.41	34.65	100	292	Peak
5147.04	44	-10	54	34.99	34.25	9.41	34.65	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148	68.56	-5.44	74	59.55	34.25	9.41	34.65	100	292	Peak
5148	48.72	-5.28	54	39.71	34.25	9.41	34.65	100	292	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	63.69	-10.31	74	54.9	34.45	9.74	35.4	100	292	Peak
5350	41.61	-12.39	54	32.82	34.45	9.74	35.4	100	292	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	71.09	-2.91	74	62.3	34.45	9.74	35.4	100	292	Peak
5350	47.49	-6.51	54	38.7	34.45	9.74	35.4	100	292	Average



Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	73.05	-15.25	88.3	65.2	34.17	6.87	33.19	100	255	Peak
5470	50.21	-18.09	68.3	42.36	34.17	6.87	33.19	100	255	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	84.04	-4.26	88.3	76.19	34.17	6.87	33.19	100	255	Peak
5470	59.82	-8.48	68.3	51.97	34.17	6.87	33.19	100	255	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	66.96	-21.34	88.3	58.63	34.51	7.01	33.19	100	280	Peak
5725	49.09	-19.21	68.3	40.76	34.51	7.01	33.19	100	280	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.73	-9.57	88.3	70.4	34.51	7.01	33.19	100	280	Peak
5725	57.01	-11.29	68.3	48.68	34.51	7.01	33.19	100	280	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	38	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148	58.51	-15.49	74	49.5	34.25	9.41	34.65	100	95	Peak
5148	42.89	-11.11	54	33.88	34.25	9.41	34.65	100	95	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	68.85	-5.15	74	59.84	34.25	9.41	34.65	100	95	Peak
5150	53.11	-0.89	54	44.1	34.25	9.41	34.65	100	95	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	62	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.52	63.31	-10.69	74	54.52	34.45	9.74	35.4	100	273	Peak
5351.52	46.1	-7.9	54	37.31	34.45	9.74	35.4	100	273	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350	73.66	-0.34	74	64.87	34.45	9.74	35.4	100	273	Peak
5350	52.37	-1.63	54	43.58	34.45	9.74	35.4	100	273	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	102	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	70.35	-17.95	88.3	62.5	34.17	6.87	33.19	100	110	Peak
5470	52.85	-15.45	68.3	45	34.17	6.87	33.19	100	110	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	77.42	-10.88	88.3	69.57	34.17	6.87	33.19	100	110	Peak
5470	58.11	-10.19	68.3	50.26	34.17	6.87	33.19	100	110	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	134	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	70.87	-17.43	88.3	62.54	34.51	7.01	33.19	100	259	Peak
5725	48.68	-19.62	68.3	40.35	34.51	7.01	33.19	100	259	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	84.29	-4.01	88.3	75.96	34.51	7.01	33.19	100	259	Peak
5725	64.36	-3.94	68.3	56.03	34.51	7.01	33.19	100	259	Average



<Beam-Forming Off: 2x3>

Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	36	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.6	61.89	-12.11	74	54.6	33.92	6.7	33.33	100	297	Peak
5147.6	41.7	-12.3	54	34.41	33.92	6.7	33.33	100	297	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.95	70.47	-3.53	74	63.18	33.92	6.7	33.33	100	297	Peak
5148.95	46.81	-7.19	54	39.52	33.92	6.7	33.33	100	297	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	64	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.65	63.14	-10.86	74	55.5	34.08	6.8	33.24	100	295	Peak
5351.65	49.11	-4.89	54	41.47	34.08	6.8	33.24	100	295	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5350.55	73.68	-0.32	74	66.04	34.08	6.8	33.24	100	295	Peak
5350.55	51.81	-2.19	54	44.17	34.08	6.8	33.24	100	295	Average



Test Mode :	802.11n (HT-20) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	100	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	65.4	-22.9	88.3	57.55	34.17	6.87	33.19	100	271	Peak
5470	45.38	-22.92	68.3	37.53	34.17	6.87	33.19	100	271	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	75.51	-12.79	88.3	67.66	34.17	6.87	33.19	100	271	Peak
5470	54.87	-13.43	68.3	47.02	34.17	6.87	33.19	100	271	Average

Test Mode :	802.11n (HT-20) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-20)	Relative Humidity :	56~60%%
Test Channel :	140	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	65.44	-22.86	88.3	57.11	34.51	7.01	33.19	100	265	Peak
5725	47.17	-21.13	68.3	38.84	34.51	7.01	33.19	100	265	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	82.98	-5.32	88.3	74.65	34.51	7.01	33.19	100	265	Peak
5725	62.11	-6.19	68.3	53.78	34.51	7.01	33.19	100	265	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	38	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144.45	68.87	-5.13	74	61.58	33.92	6.7	33.33	100	293	Peak
5144.45	48	-6	54	40.71	33.92	6.7	33.33	100	293	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144.15	71.87	-2.13	74	64.58	33.92	6.7	33.33	100	293	Peak
5144.15	53.37	-0.63	54	46.08	33.92	6.7	33.33	100	293	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	62	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.98	66.94	-7.06	74	59.3	34.08	6.8	33.24	100	295	Peak
5351.98	50.25	-3.75	54	42.61	34.08	6.8	33.24	100	295	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5355.72	72.68	-1.32	74	65.04	34.08	6.8	33.24	100	295	Peak
5355.72	53.42	-0.58	54	45.78	34.08	6.8	33.24	100	295	Average



Test Mode :	802.11n (HT-40) L channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	102	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	71.29	-17.01	88.3	62.96	34.51	7.01	33.19	102	247	Peak
5470	54.97	-13.33	68.3	46.64	34.51	7.01	33.19	102	247	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	76.85	-11.45	88.3	68.52	34.51	7.01	33.19	102	247	Peak
5470	61.18	-7.12	68.3	53.33	34.17	6.87	33.19	102	247	Average

Test Mode :	802.11n (HT-40) H channel	Temperature :	23~25°C
Test Band :	802.11n (HT-40)	Relative Humidity :	56~60%%
Test Channel :	134	Test Engineer :	Wii Chang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	58.88	-29.42	88.3	50.55	34.51	7.01	33.19	100	266	Peak
5725	42.84	-25.46	68.3	34.51	34.51	7.01	33.19	100	266	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	68.69	-19.61	88.3	60.36	34.51	7.01	33.19	100	266	Peak
5725	49.09	-19.21	68.3	40.76	34.51	7.01	33.19	100	266	Average

3.6 Peak Excursion Ratio Measurement

3.6.1 Limit of Peak Excursion Ratio

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

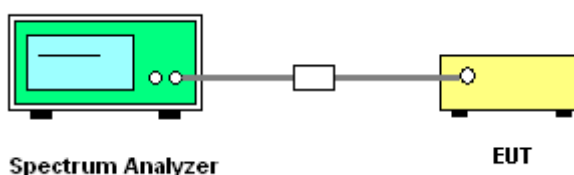
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

1. The transmitter output is connected to the spectrum analyzer.
2. The resolution bandwidth is set to and maintained at 1 MHz. The video bandwidth is set to 3 MHz.
3. Trace A is set peak detector and to Max Hold, then to View. Then the detector is readjusted to sample detector, max hold to run for 60 seconds, and the signal under this measurement condition is captured in Trace B in Accordance with the method 3 of DA-02-2138.
4. The difference between the traces is investigated. The marker is placed at the frequency, which shows the largest difference. The amplitude delta between the traces at this frequency is the peak excursion.

3.6.4 Test Setup

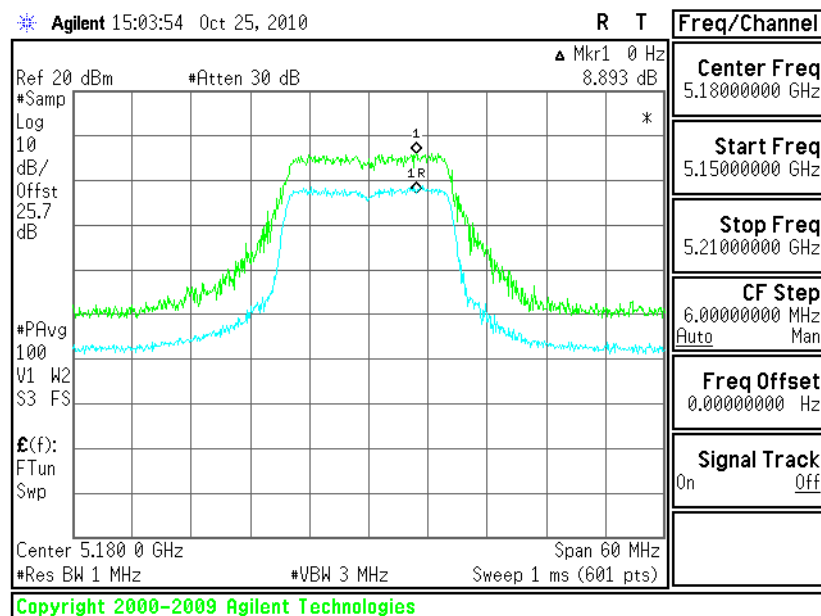


3.6.5 Test Result of Peak Excursion Ratio

<Normal: 3x3>

Test Mode :	802.11a L/M/H channels	Temperature :	25~27°C
Test Engineer :	Lewis He	Relative Humidity :	64~66%

Peak Excursion Ratio Plot on 802.11a Channel 36 - Chain 0



Peak Excursion Ratio Plot on 802.11a Channel 36 - Chain 1

